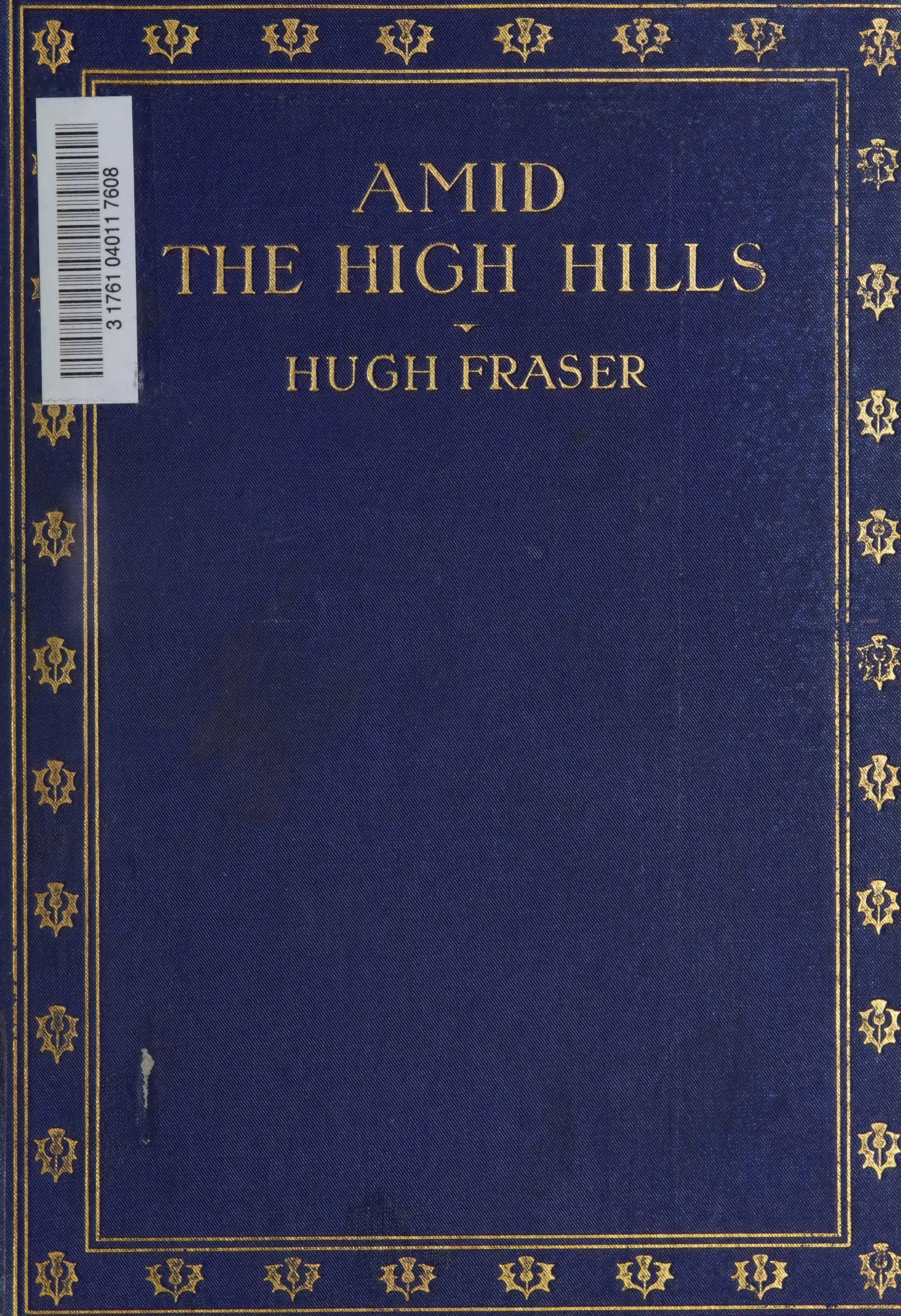

AMID THE HIGH HILLS

HUGH FRASER

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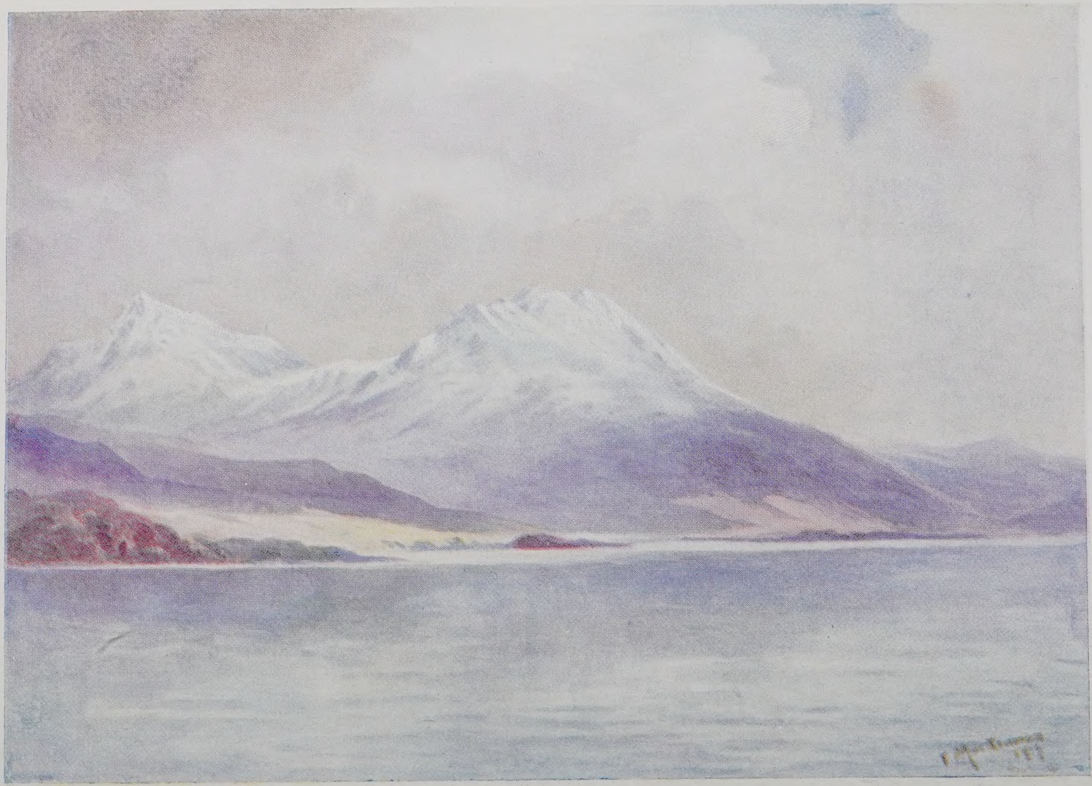

SEPTEMBER SNOW, LOCH CARRON, ROSS-SHIRE.

By Finlay Mackinnon.

AMID THE HIGH HILLS

BY

SIR HUGH FRASER

"But on and up, where Nature's heart
Beats strong amid the hills."
RICHARD MONCKTON MILNES.

A. & C. BLACK, LTD.
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TO ALL WHO LOVE THE HIGH HILLS, AND PARTICULARLY TO THOSE—MY DEAR KINSMEN AND FRIENDS (SOME OF WHOM HAVE PASSED TO THE GREAT BEYOND)—TO WHOM I AM INDEBTED FOR MANY HAPPY DAYS ON HILL, LOCH, AND RIVER.

PREFACE

For many years past from time to time I have contributed articles on sport and natural history to various journals.

It was recently suggested to me that I should publish these articles in book form, and I was fortunate enough to have friends who kindly offered to illustrate them. I have accordingly selected some of these articles, and have included others which have never been published before. Amongst the former are some which in the same or a slightly altered form have appeared in *The Field*, *Country Life*, *The Scottish Field*, *The Salmon and Trout Magazine*, and *The Saturday Westminster Gazette*. To the editors of these journals I tender my warmest thanks for their courtesy and kindness in allowing me to republish the articles in question. To my friends, Mr. Finlay Mackinnon, Mr. Vincent Balfour-Browne, and Mr. Frank Wallace, I am greatly indebted for the pictures in colour and black and white, and the pencil sketches which they have contributed.

To my friends and neighbours, Lady Anne Murray of Loch Carron and Mrs. Schroder of Attadale, my grateful thanks are due—to the former for the photograph, "Winter Sunshine—Wild Geese at the foot of Applecross Hills," and to the latter for the water-colour drawing, "An Autumn Day—Loch Carron, looking West."

To my friend, Miss Diana Darling, I am indebted for the photograph, "Among the Western Islands," and to my son-in-law, Mr. Noel Wills, for the pencil sketch of Donald M^{c}Iver, my gamekeeper and constant companion on the hill for many years.

I wish to thank Mr. W. R. Bousfield, K.C., F.R.S., for helpful criticism from the scientific point of view on my article "Birds of Fastest Flight in the British Isles," and Mr. A. D. Bateson, K.C., for his kindness in reading the book in manuscript.

In conclusion, I should like to say that, having derived so much pleasure from reading the experiences of others who love sport and natural history, I venture to hope that these pages may bring back to some of my readers recollections of their own delightful days amid the High Hills.

H. F.

Stromeferry, Ross-shire,
August 7, 1923.

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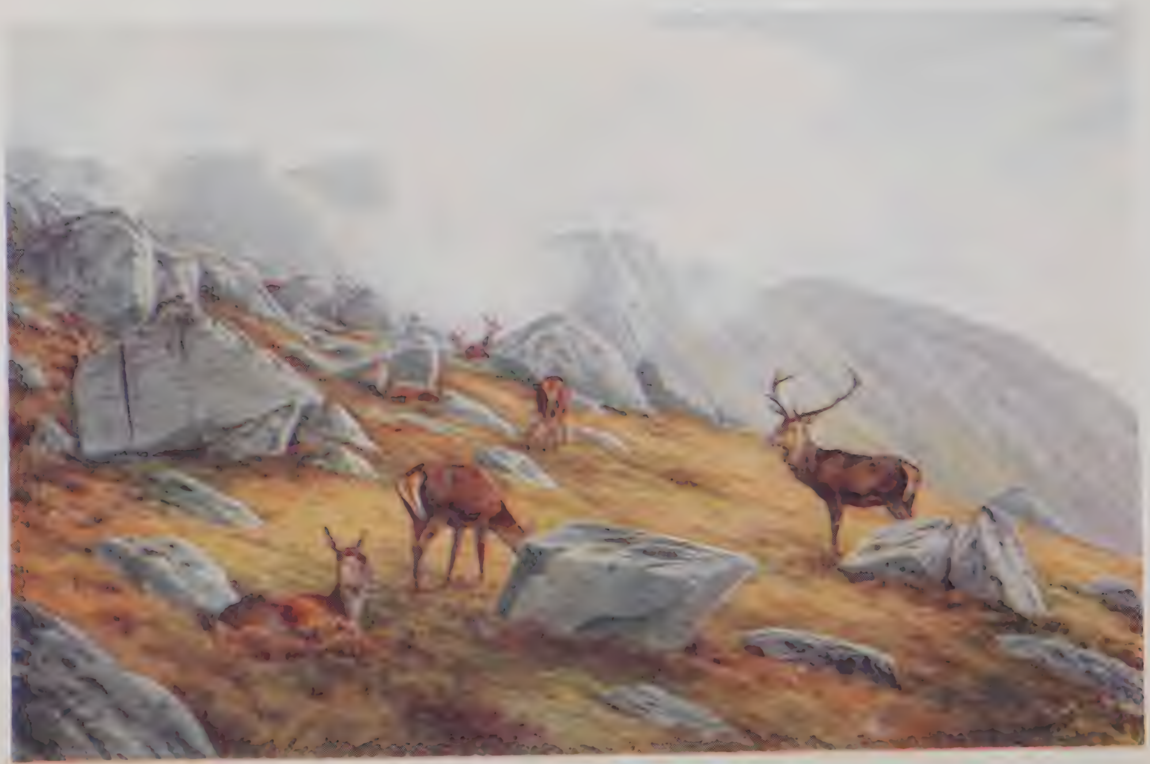


"THE JOY OF WATCHING DEER WHEN THEY HAVE NO SUSPICION THAT THEY ARE BEING WATCHED."

By V. R. Balfour-Browne.

I

THE CHARM OF SPORT AMID THE HIGH HILLS

The fascination of deer-stalking is largely due to the romance of the hill—the hill as it is known only to those who love it and understand something of its hidden mysteries. The long day, all too quickly ended, with the silent but sympathetic stalker—alone with Nature in its most inspiring and elevating form—the ever-changing beauty of sky and hill—the joy of watching deer when they have no suspicion that they are being watched—the opportunities of seeing rare birds and finding rare plants—all these things apart from the difficulty and interest—and the greater the difficulty the greater the interest—of trying to outwit—in other words trying to get within shot of the particular stag one is after—go to make up the attractions of what some of us think is the very best of true sport.

I well remember a famous statesman, who had himself owned one of the best deer forests in the Highlands, saying to me that the greatest attraction of stalking is that it takes one to places where otherwise one would never go, and enables one to see the most wonderful things which otherwise one would never see. Further, there is probably no form of sport where less pain and suffering are inflicted, assuming that any one who stalks will take the trouble to know his rifle well, and will not take a long or risky shot. The shot itself after all plays only a small part in the pleasure of a day's stalking. I have friends, first-class rifle shots, who delight in stalking, and who, when they have arrived within shot of the stag they have stalked, will sometimes not shoot at him at all. This would not always be easily accomplished by those who have strongly implanted within them the instincts of the hunter, or perhaps I should say the primitive man.

Again, to pass from stalking, what is the real explanation of the intense enjoyment of ptarmigan shooting on the high tops after the close of the stalking season? I have more than once heard this described as the most enjoyable of all kinds of shooting. As is well known, on a still clear day the ptarmigan is the easiest of birds to shoot, but on a wild windy day one of the most difficult—twisting and turning with extraordinary rapidity. Neither this latter fact, however, nor the exhilarating and bracing air at the altitude where these birds are to be found wholly explains the enthusiasm of those who have had this sport. I have no doubt that the environment of the high hills and all that this means are largely the cause of this enthusiasm. The delights of grouse shooting, whether in the case of driven birds, or over dogs, are greatly increased by the same cause. Without entering upon the well-worn controversy as to the respective advantages and disadvantages of these two forms of sport, is there any one who has enjoyed both of them amid the hills who has not ineffaceable memories of the vistas of marvellous beauty which he has revelled in again and again while waiting in his butt for the first birds of the drive, and—to change the scene—of the pleasures of many a glorious twelfth in the company of an old friend with whom he was in perfect sympathy, watching the dogs at work amidst the purple heather on the side of the hill or along the heather-clad banks of a burn?

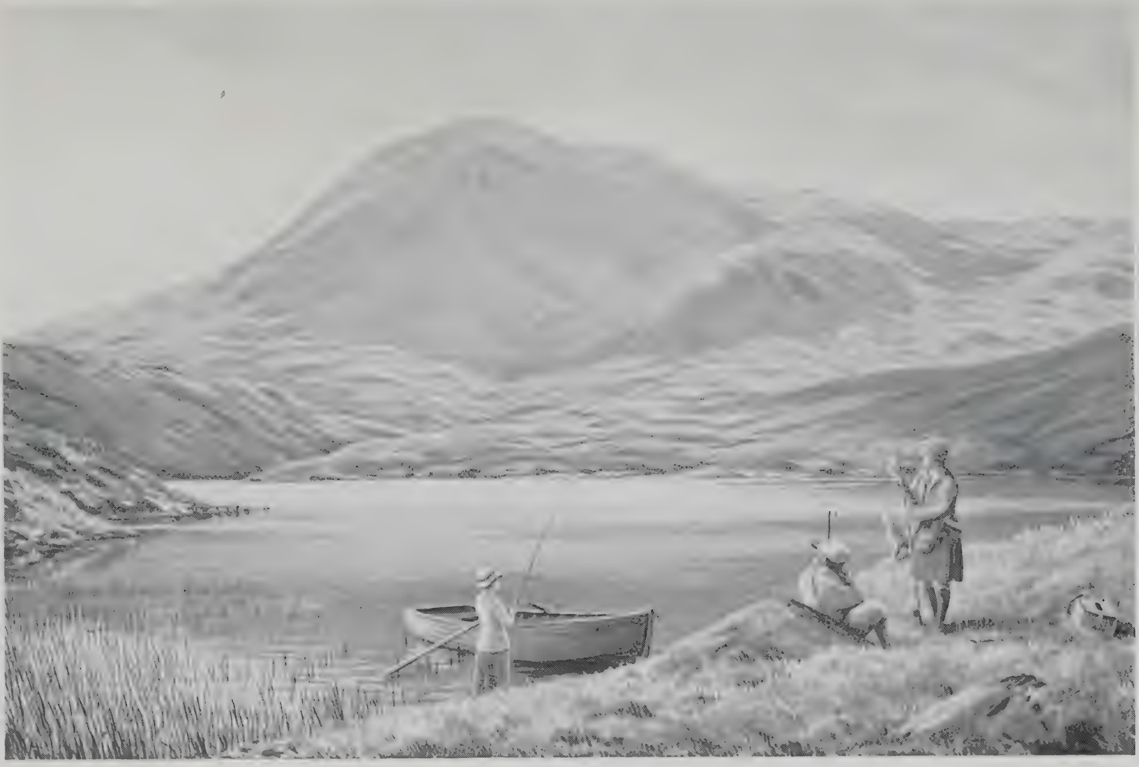
It is true also of salmon and trout fishing in the Highlands that the angler's sense of peace and contentment is largely due to the influence of the hills. This is especially so in the golden days at the beginning of August, those glorious days before the serious fun begins, when the trout in the loch are more of an excuse than a serious ploy, when one discusses the growing antlers of the big hart on the Home beat, when one basks in the sunshine of the High Hills.

Whilst writing what I have already said about stalking I recollected the following verses, which I intend to keep and read for my encouragement in days to come—days which are, I hope, still very far off:

NORTHWARD BOUND

(Once More)

Does your heart still beat with the old excitement
As you wait where the Scotch expresses are?
Does it answer still to the old indictment
Of a fond delight in the sleeping-car,
As it did when the rush through the autumn night meant
The Gate of Desire ajar?



GOLDEN DAYS.

By V. R. Balfour-Browne.

Or has the enchanting task grown tougher,
And has that arrow beyond you flown ?
For the hill that was rough enough is rougher,
The steepest climb that was ever known,
And the forest appals a veteran duffer
Sorely beaten and blown ?

Oh ! the years, the years, they be rusty and mothy ;
Oh ! the flesh it is weak that once was strong ;
But the brown burn under the stone falls frothy
And the music it makes is a siren song ;
Then the pony 'll take you as far as the bothy,
And that 'll help you along.

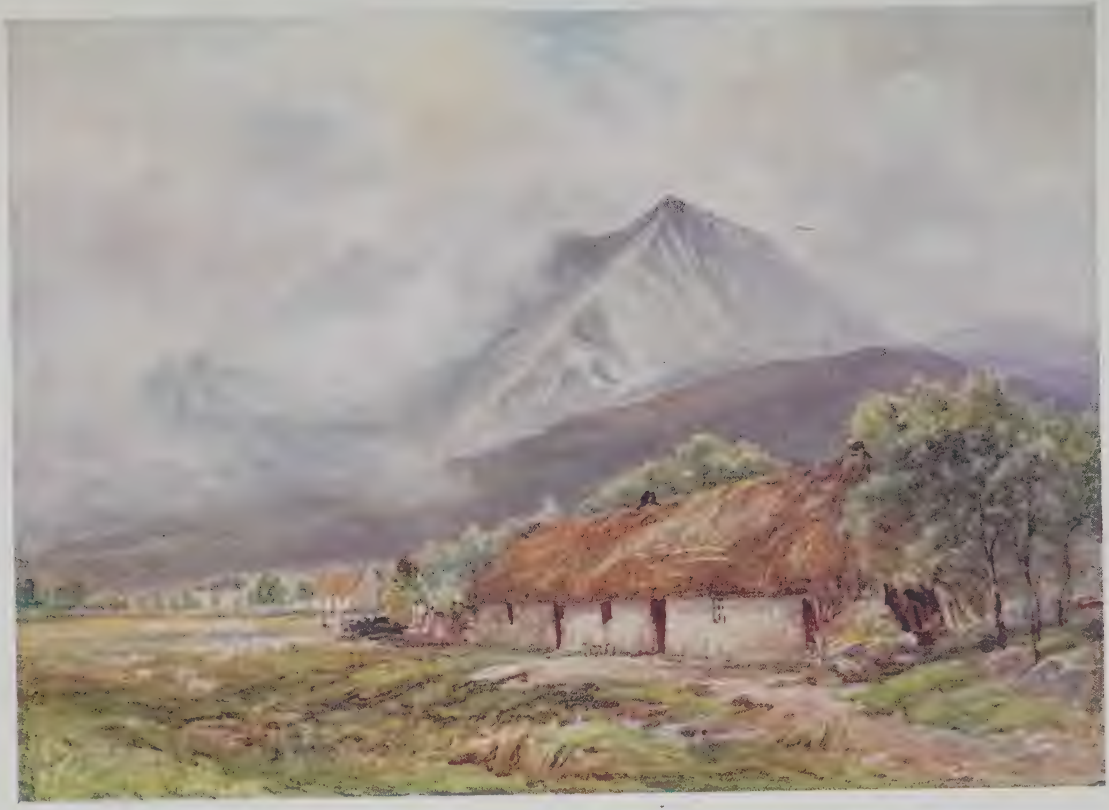
See ! from the tops the mist is stealing,
Out with the stalking-glass for a spy ;
Round Craig an Eran an eagle's wheeling
Black in the blue September sky.
A fig for the years ! Why, youth and healing
At the end of your journey lie.

(Reprinted from *Punch*, Sept. 14, 1921, by kind permission of the Proprietors.)

II

STALKING IN ITS MOST ENJOYABLE FORM

By far the most enjoyable form of stalking is to be one's own stalker, but this can only be done satisfactorily in a forest with which one is thoroughly familiar. It is astonishing what tricks the wind will play in certain corries, and as a result what mistakes even a good stalker will make in a forest which is new to him. Moreover, any one stalking by himself, unless he has experience, may easily make another kind of mistake. He may think that he has missed a stag when he has in fact killed him. Any one who has had experience in shooting deer knows that a stag when shot through the heart will



"SEE! FROM THE TOPS THE MIST IS STEALING."

By Finlay Mackinnon.

sometimes gallop for forty or fifty yards or even further and then fall down dead.

Some years ago, preparatory to a few days' stalking in a deer forest in Inverness-shire, I arrived one evening at the Lodge ; and later on about half-past ten there returned from the hill a guest in a state of great dejection who had never stalked until he went out in this forest a few days before. I felt very sorry for him, for he had been keen to secure a good head and said that he had had a splendid chance of a fine stag standing broadside at about eighty yards and had missed him. This was his last chance as he was leaving early next morning. Two days later I was out on the same beat when the stalker suddenly grasped me by the arm and said, " There is a stag lying down there to the left of that hill below us. Are you seeing his horns above the ridge ? " We went cautiously down in the direction of the stag, but had not gone far before we discovered that the stag was dead. " That," said the stalker, " must be the stag Mr. X. shot at two days ago." We examined the stag and found that he had been shot apparently through the heart from the knoll from which X. had taken his shot ; it was obviously the same stag. The stalker then told me that X. wished to stalk the last hundred yards alone and had asked him to stay behind, that X. had the shot and came back saying that he had missed the stag. Neither the stalker nor X. had thought it worth while to look for the stag. In the case of X., who was a novice at stalking, I was not surprised, but I was amazed that the stalker had not done so, although he was young and not very experienced. So X. secured a good head after all, and no doubt both he and the stalker learnt a lesson which neither is likely to forget, but at the cost to X. of much unnecessary misery and humiliation and incidentally to his host of much good venison.

It is sometimes difficult to be sure what is the result of one's shot, and it is a great assistance to have the opinion of an experienced stalker whether he has his glass on the beast at the moment the shot is fired or not.

I was coming back one evening after a delightful day's stalking in Glen Carron when the stalker Macdonell said, " One moment, sir, there is a stag down there just gone out of sight. If you can shoot off your knee downhill you will have a chance directly." I sat down and waited, and in a few minutes the stag appeared. I believed I was steady and on him in the right place. Directly I fired he galloped off. “ I’m thinking you’d better shoot again,” said Macdonell. “ What’s the use,” I replied, thinking I had shot the stag through the heart. However, as I spoke, I did shoot again out of respect to Macdonell, whom I knew to be a very experienced stalker, and the stag rolled over like a rabbit which has been shot in the right place. “ Now we will see,” I said, “ where the two bullets went.” “ I’m thinking,” said Macdonell, “ you missed him the first time.” “ You may be right,” I replied, “ but I don’t think so ; one thing I know, and that is that if I did and had known it, I should probably have missed him with my second shot also.” On examining the stag we could only find one bullet mark, and on skinning him we found that one bullet only had struck him, and that was through the heart. Macdonell no doubt thinks to this day that I missed the stag with my first shot, and killed him with my second when he was galloping ; but I still have my doubts. The moral is that though one sometimes hears the unmistakable thud of the bullet striking the stag, there are other occasions when it is difficult to be certain as to what has happened, and therefore it is always wise to satisfy one's self in the matter as far as possible. Still more is this essential when stalking alone. In stalking alone there is this advantage, that one can always secure the best position in which to shoot, whereas if one is accompanied by a stalker, he sometimes takes that position himself and it is not easy to get him to move on, or, as is more often the case, there is no time for him to do so.

Mr. Charles J. Murray of Loch Carron, to whose kindness I am indebted for many delightful days' stalking, is particularly devoted to this form of sport. A few seasons ago I was obliged to come south before the end of the stalking season, and received from him a letter which describes, far better than I can, the pleasure of being out alone on the hill.

" You are missing the West Coast," he wrote, " at its (*weather*) best! for we have a spell of gloriously fine weather when the stag can hear a footstep half a mile off, and the wind is so gentle that it cannot make up its mind which way to go, but strays gently to and fro and round in little circles, stimulating evil words among the stalkers.

" Yesterday I was out alone and worked up to a Pasha and his Harem—the ladies between him and me—he just out of shot on a hillock behind them—approach from the front impossible, but just a chance—almost a certainty with a fair breeze—from a rock to one side, *if* he should come down to his ladies before they got a puff. I risked it and got a comfy corner in the sun and waited to see which would win—the affectionate impulses of the stag or the more wavering evolutions of the scarcely perceptible puffs of wind, the old lady sixty yards away looking serenely at the top of my head. Needless to say that after two hours, just when the stag stretched one fore foot and began to hum a love ditty, I felt a well-known cool feeling at the back of my neck, and the party adjourned the meeting. Luckily I am not bloodthirsty, but enjoy being among deer, and on these occasions driving snow and rain, or sunshine and a dry tussock to curl up on, make all the difference."

III

A GREAT FISH AND A GREATER FISHERMAN

The river Wye goes out to sea
By stealth, in silent secrecy :
Among the hills she winds and wends
And wanders by the sombre woods,
And cleaves her way in circling bends
Through mountain solitudes.[1]

Towards the end of March 1921 I received an invitation to fish the river Wye, which, as every one knows, is famous for its heavy salmon. My own rods and tackle were in the North of Scotland, and there was not sufficient time to send for them. I knew that in the spring the fishing in this particular river was almost entirely by spinning with the minnow. I arrived at my destination on Monday, March 28, and had five days' fishing before me. There had been a good deal of rain before I arrived, and the river was both too high and too much coloured. The fishing on my host's beat had so far been very disappointing. During the preceding six weeks the river had been fished almost every day by my host and one or other of his friends; but although hardly any fish had been lost, only five had been killed, all with the minnow, the largest being 29 lb. My kindly host, who is a past master of all things connected with salmon and trout fishing, fitted me up with first-class equipment. I had never used a Nottingham or Silex reel before, and it took me the greater part of my first day to acquire the art of throwing the minnow effectively. For the next two days I fished with the minnow from morning till night without getting a pull or seeing anything. I have been a keen fly-fisher all my life and have killed a good many salmon and many trout, and on Friday morning, as the river had fallen considerably, I told my host that if I might do so I should like to try the fly. He readily assented, and said that I should have one of his own fly rods, and before we started he kindly gave me several salmon flies, and said that his butler, C., who was an experienced hand at gaffing salmon, should come with me. Among the flies which my host had given me was a " Mar Lodge " (size 4/0), and with this I fished all the morning and up to about three o'clock in the afternoon without, however, seeing or touching anything. C. said that he was afraid the day was going to be a blank again. I said that I would like to try once more a particular spot below a rock in the upper part of a pool higher up the river, which I had fished in the morning and which I thought looked a very likely place for a salmon to lie. In order to fish this pool it was necessary to use a boat. It was a beautiful afternoon and the sun was still shining. We crossed over the river at the bottom of the pool and rowed up on the other side, keeping close to the bank so as not to disturb that part of the pool which I was going to fish. C. worked the boat with great skill, and at my first cast I managed to place my fly exactly where I wished it to go below the rock. As the fly swung round with the current I suddenly saw for a second a huge silvery fish in the clear, transparent water upon which the sun was shining. At the same moment the line tightened. " I have him," I said, as the line went screeching off the reel. The fish ran straight up-stream for about ninety yards, and then leaped twice, high into the air. It was by far the largest salmon I had ever seen, clean-run and glittering like a silver coin fresh from the Mint. This first danger safely passed, I gradually persuaded him to come back again. C. said, " He must be well hooked, and he's a very big fish. That fish of 29 lb. which the Major got would look quite small beside him." For some time after this the fish moved about the pool, but made no attempt to run. He then made a violent rush of about sixty yards, and lashed about on the top of the water, once more showing himself and giving us a fair idea of his size. Again I got him well under control, and for a considerable time he adopted the same tactics as before, moving slowly and steadily backwards and forwards at varying depths. I had been thinking for some time that perhaps I had been rather too easy with him, and that I had not acted on the maxim with which, I suppose, almost every salmon fisher will agree, that one ought never to let a fish rest, and that a big fish may take hours to land if he is not worried enough. The line and cast had been thoroughly tested before we started, and I felt that I might depend upon them. C. told me that as soon as I had hooked my fish he had looked at his watch, and that I had now had him on for an hour and twenty minutes. This greatly astonished me, as I had not realised how the time had gone. But it was nevertheless the fact, and I felt that we must do something to stir the fish. We accordingly decided to move a little way up-stream. C. had hardly begun to move the boat with this object in view when the salmon suddenly moved, and moved to some purpose. Neither I nor C. had ever seen anything in the movements of any fish to compare with the strength and rapidity of that rush. The salmon went at a terrific pace, straight up the river as hard as he could go for about 110 yards, and then leaped twice, straight up into the air, about a couple of feet above the surface of the water, broadside on, showing that he was a tremendously thick fish. At the very moment he was in the air the reel fell off the rod, and at that moment I became conscious, although, of

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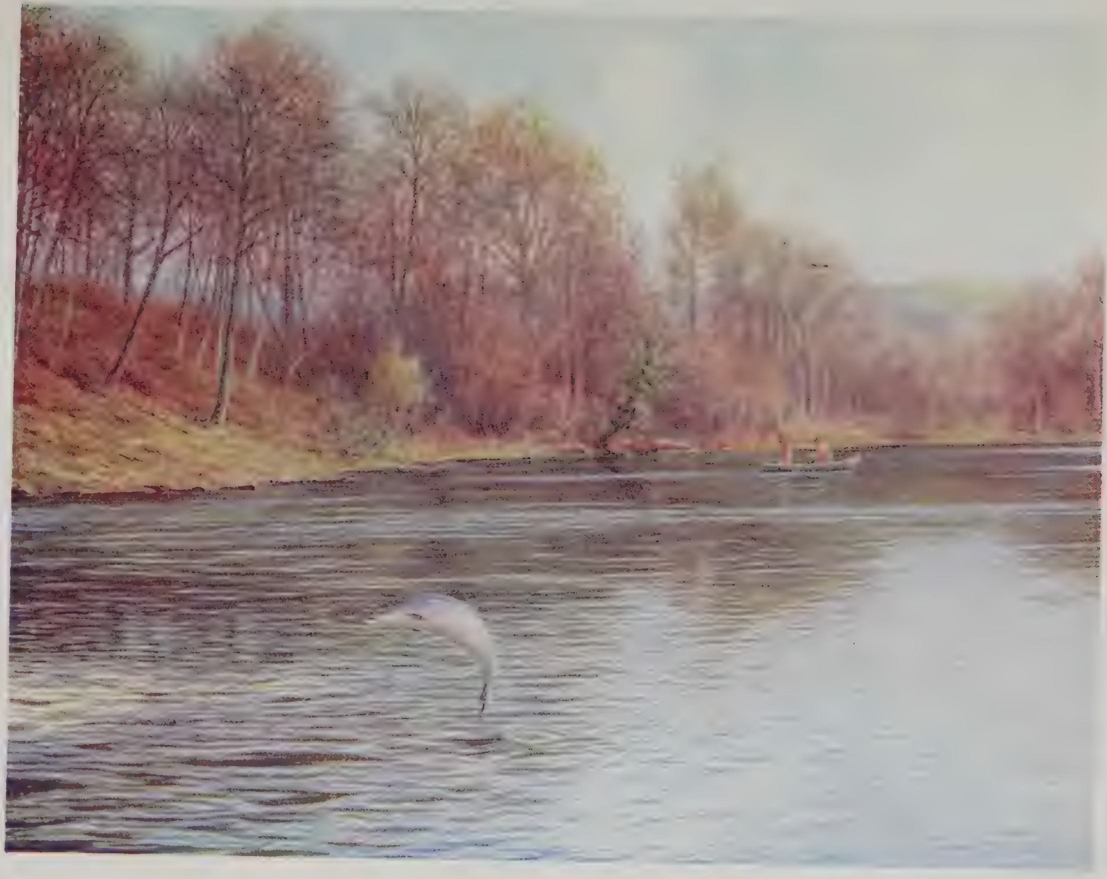
[1] "The Death of the Wye," *Images and Meditations, a Book of Poems*, by Mary Duclaux. T. Fisher Unwin, Ltd., London.



"THE SALMON LEAPED TWICE STRAIGHT UP INTO THE AIR."

By V. R. Balfour-Browne.

course, I had lowered the point of the rod when he leaped, that the great fish had parted company with me for ever. "He has gone," I said, as with a sickening sense of disappointment I reeled in the slack line in the faint hope that he might still be on, having turned and come down the river again—but no, it was not to be, and the line soon came back to me, the cast having been broken about a foot from the end. C. said not a word, nor did I for a time. No mere words are appropriate on such an occasion and cannot diminish the loss of a fresh-run spring salmon, so marvellously brilliant and beautiful, and in this particular instance probably half as large again, perhaps twice as large, as the biggest fish I have ever landed during the time, now more than forty years, that I have been a salmon fisher. Within a short time I started fishing again, but the day was done and we saw nothing more. After the catastrophe I found that the reel had been loose, and that the wedges used to make it fit closely to the rod had shifted and finally fallen out in consequence of the rushes made by the fish. I also learnt later on that the rod did not belong to my host, and that by a misunderstanding this rod, which happened not to have been taken down, but was among the other rods ready for use, was given to me. Probably, had I been warned about the reel, I could have prevented it from falling off, though whether this would have made any difference it is impossible to say, as many a good fish has broken the cast by falling back on it after jumping at the end of a long rush, and the more line there is out the more danger of losing the fish when he jumps.

In the words of one of the most experienced of fishermen, Mr. Horace G. Hutchinson: " There is one antic that a fish may perform which may, if you are unlucky, defeat you, however quick and skilful you are—that is, if he jumps and falls back on the cast. If you do not drop the point of the rod so as to let the gut go slack when he jumps, you are nearly sure to be broken if he falls back on it. If you drop quickly enough, it is bad luck if you are broken, but it is bad luck which sometimes does befall. If much of the reel line is in water, the drop of the rod top does not communicate slackness to the cast quickly enough; the fish may come on to it when it is tolerably taut—result disaster ! "

Being a Highlander and therefore of a superstitious race, need I emphasise the fact that the day of this, the greatest, tragedy of my life as a fisherman was a Friday, and that Friday the 1st of April. In this connection it is worth recalling that no references to April Fools' Day have been found in our earlier literature, and it seems that this country has derived the fashion from France, where April Fools' Day is a very ancient institution, and where the dupe is known as " poisson d'avril." The April fool in this story was the fisherman, not the fish. The following day, Saturday, I tried to make the most of my last chance and fished all day long, but without a sign of anything. Of course, there was a great discussion as to the probable weight of the fish, which had given both C. and myself several opportunities of forming some estimate on the subject. We both agreed that it could not have been less than 35 lb., and was more probably round about 40 lb. But my story has an interesting sequel. On the following Monday I returned to London; and on the Tuesday, when fishing the pool which was the scene of the catastrophe, my host made a discovery which I can best relate by quoting from a letter which he wrote to me on the following day.

" Yesterday afternoon," he wrote, " when fishing your famous pool I found what I feel pretty sure were the mortal remains of your big fish. He had fallen a prey to an otter, which after your long fight with him is easy to understand. He lay on a rock just above the place where you hooked him, and considerably below where you parted company. A large ‘ steak ’ from the middle had been removed by his ultimate captor, but the head and tail portions were there. From examination of his head he had certainly been *recently* hooked *firmly* on the right side of the upper jaw. He was extremely thick, and must have been a most handsome fish of at least 35 lb. I took home two or three scales, and his age appears to have been between four and five years.”

I subsequently learnt that from its condition this fish had no doubt been killed some days before it was found, and as it seems highly likely it was the fish that had defeated me, it must somehow or other have got rid of the fly by rubbing it against the rocks, a feat which is generally believed to be by no means unusual and which in this instance would, no doubt, be rendered easier by the fact that the hook was a good-sized one, being about 2 in. long.

C., who was with my host at the time, said that he also felt sure that it was the same fish. So it would appear that the victory of the great fish was after all shortlived, and that he was probably captured by a far greater fisherman than any mere mortal man—let alone my humble self.

It is a very interesting fact that in the week before that in which I was fishing, among the salmon which were killed on the neighbouring beats were three, each of which weighed slightly over 41 lb. It seems not unlikely, therefore, that my fish may have run up from the sea in the company of these splendid fish, and have been much the same weight as they were.

Notwithstanding my great disappointment I heartily agree with the words of Arthur Hugh Clough in *Peschiera* :[1]

'T is better to have fought and lost,
Than never to have fought at all.

On describing my battle to an old friend, who is himself no fisherman, but a great sportsman, he replied by quoting from a writer, whose name he did not know, the following lines, which I had never heard before and the authorship of which was at that time unknown to my friend also:

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[1] It is singular that this poem was written and published in 1849, and that Tennyson's *In Memoriam*, which contained the famous lines :

" 'T is better to have loved and lost,
Than never to have loved at all,"

was written in 1834 but not published until 1850, and then anonymously. This is surely very remarkable, for it is impossible to believe that a man of the high and noble character of Clough would have consciously plagiarised any other poet.

Upon the river's bank serene
A fisher sat where all was green
    And looked it.
He saw when light was growing dim
The fish or else the fish saw him
    And hooked it.
He took with high erected comb
The fish or else the story home
    And cooked it.
Recording angels by his bed
Weighed all that he had done or said
    And booked it.[1]

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[1] After the publication of these verses in the above article, as it originally appeared in the issue of *Country Life* for August 6, 1921, their authorship was discovered through the kindness of some of the readers of that journal and the enterprise of its editor. In a letter in *Country Life* for August 27, 1921, Bishop G. F. Browne, late Lord Bishop of Bristol, thus describes their origin. " The first three stanzas were composed at Lowick Rectory, Northants, by the rector, J. S. Watson, his daughter Betty, and Dean Ingram of Peterborough. The authors felt that there ought to be a concluding stanza, ambiguously stating a final result. I told the story to Father Waggett on our way from Bournemouth to Clouds, and he suggested ' booked it ' as the point of a last stanza. On that hint I wrote the stanza. In my book I remark that its tendency would be unjust to any real fisherman's imaginative powers."

Fast Enough for Me!

IV

THE BIRDS OF FASTEST FLIGHT IN THE BRITISH ISLES

SOME little time ago, a correspondence appeared in the *Observer*[1] and the *Field*[2] as to which is the quickest bird in flight. Various correspondents, some of them well-known naturalists, writers of repute, and sportsmen of experience, expressed their views, by no means unanimous, on the question. I have always been greatly interested in the subject, and for many years past in the North of Scotland have been in the habit of watching bird life in some of the wildest and most inaccessible parts of the country.

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[1] December 11, 18, 25, 1921.

[2] January 28, February 4, 11, 18, 1922.

I have examined the evidence contained in the valuable and interesting correspondence mentioned above, and have also obtained all the information I could get elsewhere from books of authority and persons who have had special opportunities of observation. At the present day a valuable and novel class of evidence is available—that of observers in aeroplanes. Upon all the material thus obtained I have tried to form an impartial opinion.

There appear to me to be four points to be borne in mind before arriving at any conclusion as to which bird is the quickest in flight, and the maximum speed of which each bird is capable.

Emphasis is laid on the first three of the following points in some of the letters in the correspondence above referred to, but I think that the fourth point is of at least equal importance.

1. Ground speed must be distinguished from air speed.
2. The path of flight must be horizontal.
3. There must be something to show that the bird is flying at its maximum speed.
4. There must be a standard length of flight to which the test is to be applied.

1. *Ground speed must be distinguished from air speed.*

It is not generally realised that a bird has two speeds: its speed relative to the ground and its speed relative to the air.

" Ground speed " is " air speed " as influenced by the wind. In a perfectly still atmosphere " ground speed " and " air speed " are the same. To quote one of the writers in the *Field* of February 11, 1922: " The wind has no effect on the speed at which a bird is capable of driving itself through the air. Take a parallel case, substitute for the bird a caterpillar, and for the atmosphere in which the bird is flying a sheet of paper. The caterpillar can always crawl at a constant speed across the paper, although it is possible to increase the relative speed of a caterpillar to the ground by moving the sheet of paper."

Or to put the same distinction in the words of another writer in the same number of the *Field*: " It is the speed of the object over the ground or still water that matters; and if the medium (*i.e.* air or water) in which the object under discussion is either flying or floating is also in movement, then the pace over the ground will naturally be correspondingly increased or decreased."

Wind, of course, varies in two ways (1) direction and (2) velocity, and is uniform only at a given height.

The direction of the wind must necessarily be either along the line of flight of the bird, against it, or at an angle with it. In the first of these instances the speed of the bird over the ground is determined merely by adding the velocity of the wind to, and in the second by subtracting it from the air speed of the bird, in the same way as a swimmer's speed is increased or reduced by the speed of the current. The third case is more complicated, as in this calculation allowance must be made for " drift," *i.e.* the tendency of a bird under such circumstances to deviate from its desired course. It is, however, unnecessary to say anything further as to this third case, as the comparison of speeds of various birds can only be made satisfactorily by ascertaining their speeds under identical conditions in horizontal flight.

2. *The path of flight must be horizontal.*

In the words[1] of Captain C. F. A. Portal, D.S.O.: " If any one has seen a peregrine stooping

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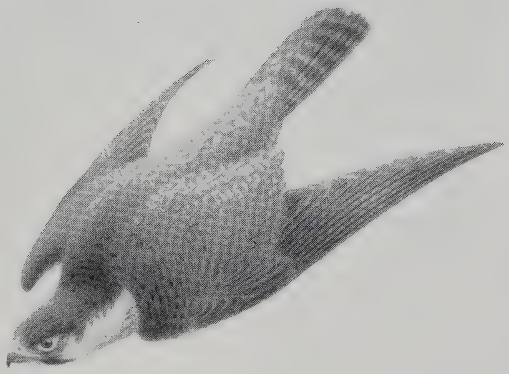
[1] *Field*, February 18, 1922, p. 233.



THE PEREGRINE FALCON.

By V. R. Balfour-Browne.

from 1000 feet at between 150 and 200 miles per hour at a partridge, and has later seen the same peregrine chase the same partridge from a standing start, he will appreciate the importance of considering only level flight. In the first instance the hawk is nearly 100 miles per hour faster than the quarry, in the second, he can only just overtake it at all. There is no conceivable way of measuring the speed of these downward flights accurately, but no one who has done any hawking will deny that 120 miles per hour is within the power of a great many species. When we come to consider level flight, there is a very different story."

3. *There must be some evidence to show whether the bird is flying at its maximum speed or not.*

As was recently pointed out in an interesting article[1] by Colonel R. Meinertzhagen, D.S.O.: " Birds have two speeds: a normal rate, which is used for everyday purposes and also for migration, and an accelerated speed, which is used for protection, or pursuit, and which in some cases nearly doubles the rate of their normal speed; some of the heavier birds can probably only accelerate to a slight extent. In this conclusion I am naturally excepting courtship flight, which is usually of an accelerated nature.''

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[1] " Velocity of Flight among Birds," by Colonel R. Meinertzhagen, D.S.O., in the *Ibis* for April 1921, pp. 237-238.

To quote the words of Major C. R. E. Radclyffe:[1] "The only possible test we can accept is where two birds are matched one against the other, and we are certain they are both trying their hardest. No better test than this is the case of a hawk pursuing its quarry, when it means to one of them its food and to the other its life.''

The same writer draws attention to a common fallacy: "It is,'' he says,[1] "purely a matter of optical illusion to imagine that a smaller-sized bird is flying faster than a larger bird of similar shape and make; for example, a snipe on rising ground seems to go much faster than a woodcock, similarly a teal than a duck, and possibly this may be so for a short distance, but put up the first two together, and also the last two, and let there be a peregrine after them—as I have seen many times—and the scene is amazing to a man who is not a falconer, as the smaller bird is overhauled first every time by the falcon, and presumably they are all trying their hardest. . . . I have dozens of times put up a peregrine over ponds and marshes where teal and ducks were sitting together, and then flushed the wild fowl all simultaneously. In every case without any exception the first bird overhauled and brought to the ground has been a teal, and in the case of a long flight when every bird has been flying for its life, the further they go the further the teal lag behind the wild ducks. The same remarks apply to woodcock and snipe, to black game and grouse, to pheasants and partridges—all of which I have flushed simultaneously in front of hawks."

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[1] *Field*, February 18, 1922, p. 234.

In dealing with the same point in a letter written to me, Major Radclyffe makes the following interesting observations :

" . . . Few people realise that a pheasant flies much faster than a partridge when they have both been going a short distance. If you flush an old cock pheasant and a covey of partridges together in a big field of turnips, you will see the partridges are quickest ' off the mark ' and away with a bit of a lead, but the pheasant will catch them, and be first over the fence if they have 200 or 300 yards to go.

" Again take as an example a woodcock and a snipe. I have several times flushed these two birds together, and in no time the woodcock has left the snipe far behind him, and yet I believe that ninety-nine sportsmen out of a hundred would say the snipe flies faster than the woodcock.

"I have seen woodcocks give my hawks some great long-distance flights before they are overtaken and turned; but a snipe has no show at all when trying to keep ahead of a peregrine or merlin in straight flight."

In his letter to the *Field* already referred to, Major Radclyffe further says: "There is no doubt whatever that the heavier bird of similar type is far the faster on the wing when once it gets going."

It was suggested in one of the letters to the *Field* that whilst this is no doubt the general rule there is at least one exception to it. "If asked," said the writer, "to quote any instance when the smaller bird is faster than a larger one of similar type, I should say that the pochard (*Fuligula ferina*) is faster on the wing than the common mallard, as I have seen the former pass mallards on the wing when both have been flying before a falcon. But from my experience of over thirty years as a falconer, a naturalist, and a shooter, I should say that the above case is one of the rare exceptions where the heaviest bird is not the fastest on the wing if each bird is trying its hardest and best."

Colonel Meinertzhagen, whilst agreeing that the heavier bird of similar type is the faster flier once it gets going, has kindly sent me the following observations on the foregoing statements as to the pochard and mallard. " The common pochard is not a bird of ' similar type ' to a mallard, the one being a diving duck and the other surface-feeding. They differ in the proportion of wing area to body weight, also in bone structure. The pochard and all diving duck, probably fly faster than surface-feeding duck under similar conditions, having heavier bodies in proportion to the wing area than is ever found among surface-feeding duck. The eider duck, which is even heavier than the ordinary diving duck (*Nyroca*), probably flies faster than them all when once started."

4. *There must be a standard length of flight to which the test is to be applied.*

If the question were asked, " Who is the faster runner, A or B ? " the reply would surely be " To what distance are you referring ? " A short or a long distance ? Applying the analogy, it is obvious that a bird might be much faster than another for a short distance, but if the flight has to be prolonged, may not have the lasting powers of another bird, and therefore would be beaten on the longer course.

It seems likely that the fact of not considering one or other of these points may account for the difference in regard to some of the views held by observers of experience. For instance, may it not account for the fact that there is such a marked difference of opinion as to whether the peregrine is faster than the golden plover? May it not be true that for a short distance the latter bird may be the faster flier, but that in consequence of its lack of staying power it is overtaken before it goes half a mile unless it can elude its pursuer by twists and turns. In this connection it is worth recalling the experiences of that acute and accurate observer Charles St. John[1]: "The golden plover," he writes, "is a favourite prey, and affords the hawk a severe chace before he is caught. I have seen a pursuit of this kind last for nearly ten minutes—the plover turning and doubling like a hare before greyhounds, at one moment darting like an arrow into the air, high above the falcon's head; at the next sweeping round some bush or headland—but in vain. The hawk with steady relentless flight, without seeming to hurry himself, never gives up the chace till the poor plover, seemingly quite exhausted, slackens her pace, and is caught by the hawk's talons in mid-air and carried off to a convenient hillock or stone to be quietly devoured."

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[1] *Wild Sports of the Highlands*, chap. x. p. 135.

Colonel Meinertzhagen has been so kind as to consider the observations I have made above, and writes :

" I should doubt whether the golden plover has less staying power than the peregrine. The former migrates long distances (thousands of miles, in the case of the American golden plover, a bird almost identical with ours, which goes from Labrador to Brazil by sea), whereas the peregrine is nowhere believed to be a regular or persistent migrant over long distances. It is more probable that the peregrine is a faster bird than the golden plover and that the latter becomes exhausted by continued acceleration and fear, whereas the peregrine is accustomed to long periods of accelerated flight and is stimulated by hunger."

Again in reference to the difference of opinion as to whether the teal is faster than the mallard, may it not be possible that both views may be correct ? in other words, that it depends upon the length of flight which the writer is considering. It may be noticed that Major Radclyffe in the passage which I have quoted above (p. 28) seems to consider it may be possible that for a short distance the teal may be faster than the mallard, though he has no doubt that the latter bird will very soon overtake the former.

The falconer has certainly more and better opportunities of seeing birds flying at their maximum rate of speed than any one else. "He also has," to use Captain Portal's words, "the advantage of possessing in his trained hawk a known quantity with which to compare the performances of other birds."

Captain Portal has flown hawks at many different kinds of birds during the last fifteen years, and has made certain estimates which have been arrived at after a great deal of comparison and analysis of data obtained while hawking, shooting, flying in aeroplanes, travelling in cars and trains, and walking in the country. He says:[1] "My figures cannot be correct for every member of each species, as I have seen one partridge in an October covey fly quite 15 per cent faster than any of its companions when all were at full speed. All

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[1] *Field*, February 18, 1922, pp. 233-234.

I have tried to do is to strike an average for the species, the speed given being the maximum pace at which the bird can cover the ground in level flight through still air."

The speeds given for the peregrine and merlin are those of good trained birds; the wild ones are faster. Here are the figures:

Golden Plover	70 miles per hour.
Teal and Blackcock	68 ,, ,,
Peregrine	62 ,, ,,
Pheasant and Grouse	60 ,, ,,
Mallard	58 ,, ,,
Merlin and Blue Rock	55 ,, ,,
Partridge	53 ,, ,,
Green Plover Jackdaw	48 ,, ,,
Wood Pigeon	45 ,, ,,
Starling	44 ,, ,,
Kestrel	43 ,, ,,
Rook	40 ,, ,,
Landrail	35 ,, ,,

The speed attained by golden plover when pressed has been estimated by airmen at over 60 miles per hour.[1]

Colonel R. Meinertzhagen, from whom I have also quoted above, states that he finds, "after eliminating abnormal conditions and observations based on meagre evidence, that the normal and migratory flight in miles per hour (ground speed) is as follows :

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[1] *Ibis*, April 1921, p. 234.

Ducks	44-59
Geese	42-55
Waders	34-51 (but mostly from 40 to 51)
Starlings	38-49
Falcons	40-48
Corvidae	31-45
Tame Pigeons	30-36
The smaller Passeres	20-37"

Amongst the birds which are claimed by different high authorities to be the fastest British birds are the swift, the peregrine, the golden plover, the teal, the wild duck, and the curlew.

It is curious that in the various controversies on the subject no one appears to have contended that the golden eagle may possibly be the fastest flier amongst British birds. This may be because, except in certain parts of the country, the eagle is never seen, and there is necessarily very little opportunity of comparing his speed with that of other birds. In particular the falconer, whose opportunities of comparing the speed of birds are, as I have already stated, greater than those of any other class of men, has no opportunities in the case of the eagle. Moreover, the flight of the eagle, like that of some of the fastest flying birds,

WINTER SUNSHINE—WILD GEESE AT THE FOOT OF THE APPLECROSS HILLS.

From a Photograph by The Lady Anne Murray of Loch Carron.

for instance, the blackcock, is very deceptive. He is in fact flying much faster than he appears to be—" The eagle's flight, when passing from one point to another, is peculiarly expressive of strength and vigour. He wends his way with deliberate strong strokes of his powerful wing, every stroke apparently drawing him on a considerable distance, and in this manner advancing through the air as rapidly as the pigeon or any other bird which may appear to fly much more quickly."[1]

The answer to the question, Which of the two birds, the eagle or the peregrine, is the faster flier, must even on a horizontal flight be a matter of pure conjecture. On the one hand, the peregrine has the advantage of pointed wings which make for increased wing power and speed, whilst the eagle's wings are rounded. On the other hand, there is a great similarity between the general build and structure of the two birds, and there is the fact emphasised by Major Radclyffe in the letters from which I have quoted above, that, as between two birds of different size but of similar shape and make, the larger and heavier bird will almost invariably fly faster than the smaller and lighter one once the former really gets going. It is, of course, true that the peregrine is much quicker in its movements and more agile than the eagle. It is constantly under the necessity of flying at its fastest (which the eagle is not) in order to secure its food ; in other words, to use the language of a stalker in discussing this question with me : "The peregrine requires a warm diet, and lives on its prey. The eagle, on the other hand, will eat carrion." The peregrine is probably quicker off the mark than the eagle, but this does not necessarily mean that he flies more quickly than the eagle once the latter gets going. Stalkers have unusual opportunities of seeing these two birds in flight, and almost all those with whom I have discussed this question believe that on a horizontal flight the peregrine is faster than the eagle. This in my opinion is probably the correct view.

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[1] *Wild Sports and Natural History of the Highlands*, by Charles St. John, ch. x. p. 131.

It must not be forgotten that the Northern falcons, or, as they are generally called, the gyrfalcons, are entitled to rank as British birds, although they are rare visitors to these Isles. They are (1) the gyrfalcon or Norwegian variety (*Falco gyrfalco*), (2) the Iceland falcon (*Falco islandus*), (3) the Greenland falcon (*Falco candi-*

cans). The gyrfalcon is a very rare visitor here, two recorded specimens only having been obtained here and one of these is doubtful. The Iceland falcon is a rare visitor also, although identified examples have been obtained here from time to time. The Greenland falcon is an irregular winter and spring visitor, but there are more recorded instances of this species than in the case of the Iceland falcon. The former bird, the prevailing ground colour of which is white, is the most beautiful of all birds of prey. By some authorities it is considered merely a race of the Iceland falcon, which it resembles in size and habits. The eggs of the two birds resemble one another. All these Northern falcons are about the same size and larger than, though very similar in structure to, the peregrine falcon. Speaking generally, the difference in length is about 5 inches, in wing 2 inches. They have been very highly valued in Europe for hawking, and, as would be expected from their superior size and similar structure, are undoubtedly faster than peregrines.

Writing in the *Field* for March 15, 1923, Major Radclyffe says :[1]

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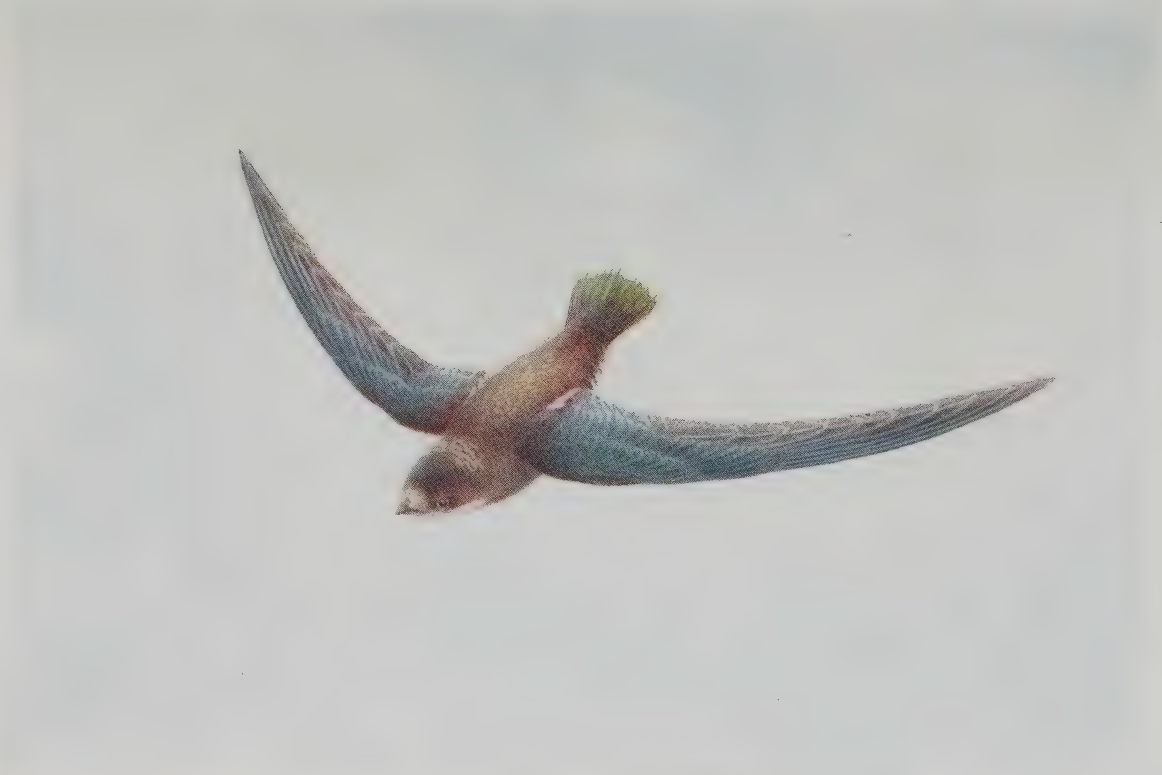
[1] See also the letter of Mr. H. G. Hurrell in the *Field* for March 8, 1923.

"All the gyrfalcons are much faster on the wing than peregrines, and having trained and flown both species of these falcons for many years I have been enabled to prove this beyond doubt."

The swift has still to be considered. There are three species of swifts which rank as British birds: the common swift (*Cypselus apus*), the Alpine swift (*Cypselus melba*), and the spine-tailed or needle-tailed swift (*Acanthyllis caudacuta* or *Chaetura caudacuta caudacuta*). The Alpine swift is a rare visitor here, only about thirty having been satisfactorily identified at different times from April to October in different parts of these islands, but chiefly in the southern part of England. It breeds in mountains throughout Central Europe, and eastwards to India. The spine-tailed swift is even a rarer visitor here, only two recorded instances of specimens having been obtained—one in Essex in 1846 and one (said to have been in company with another) in Hampshire in 1879. It breeds in the mountains of North-eastern Asia, and in winter goes as far south as Australia.

Swifts are perhaps the most powerfully winged, in proportion to their weight, of all British birds. Their form is that which has been found to make the fastest sailing vessel—full forwards and



THE SPINE-TAILED SWIFT.

By V. R. Balfour-Browne.

lengthened, and tapering backwards. The difficulty in regard to these birds, and particularly in regard to the Alpine swift and the spine-tailed swift, is to obtain the necessary opportunities and conditions for comparing their maximum speed with that of other very fast birds. It is difficult to realise merely from a consideration of the description and measurements of these three swifts in the authoritative works of ornithologists how much larger the Alpine swift and spine-tailed swift are than the common swift. I have had opportunities of handling and examining the stuffed specimens of these birds in the British Museum (Natural History) at South Kensington, and should like to acknowledge here the courtesy and assistance given to me at the Museum by Mr. W. P. Pycraft, Dr. P. R. Lowe, and Mr. N. B. Kinnear.

The actual measurements of the three birds are as follows :

	Length.	Wing.
Common Swift	6·75 inches	6·8 inches
Alpine Swift	8 ,,	8·45 ,,
Needle-tailed Swift . . .	8 ,,	8·1 ,,

It is not generally realised that the common swift, so well known in this country, which looks so imposing in flight as it glides overhead with wings extended, is hardly so large, when plucked, as a man's thumb-joint and weighs slightly over half an ounce.

Bearing in mind that as between two birds of the same build and structure the larger will, when it gets going, fly faster than the smaller one, it would naturally be expected, as is the undoubted fact, that the Alpine swift and spine-tailed swift are faster fliers than the common swift.

The falconer has in the case of the swift very little opportunity of comparing its speed with that of the peregrine. This is partly because the peregrine, whether it be the falcon (the female bird) or the tiercel (the male bird), will probably not attempt to kill the swift, it being too small a prey. There is the further difficulty that the swift rarely continues on a level flight.

I have been so fortunate as to obtain the views of several well-known authorities on this difficult question—the comparative maximum speed of the swift and the peregrine.

Colonel Meinertzhagen says :

" I should certainly say that the swift is the fastest British bird, both in its normal speed and accelerated. But any of the falcons could catch it, if caught unawares, by stooping, or perhaps two hunting together. If the swift had, say, ten seconds' warning,[1] I do not believe any falcon could touch it. As regards endurance, those birds with the greatest endurance are the swifts, swallows, petrels, and gulls. Swifts are probably endowed with the greatest powers, being denied by nature the advantages of perching, alighting on water, or resting on the ground. I have recently been studying the power of flight of various groups of birds, and find that the wings of the swift and petrel groups have wing outlines best suited for both endurance and speed. The falcon has a wing intended for short rapid flights and not for endurance.

"You have doubtless seen falcons hunting. When they set out on a regular hunt they are not usually much faster than their quarry, unless it is some unfortunate non-game bird, and they only gradually overtake it. But I think a falcon usually makes full use of surprise and force of gravity. If these fail, he often abandons the chase, recognising that wearing a bird like a golden plover or teal down by sheer endurance and honest straightforward flying is a troublesome and not always successful task."

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[1] This is a very considerable warning.—H. F.

Major C. R. E. Radclyffe writes :

" The point you raise *re* the relative speed of swifts and other birds is a difficult one to decide.

" I have, however, a strong recollection of a brother falconer (I cannot remember who it was) telling me that his trained merlins could easily overhaul a swift, and he told me that once or twice they had killed them. But this was many years ago, and I am not able to remember all the facts.

" I have often stood on the bridges here and watched swifts passing in hundreds close past me. They appear to be moving very fast when hawking after flies near the surface of a river.

" There is a long stretch of broad water in the river in front of my house here, and often there are hundreds of swifts flying up and down it. They go about half a mile dead straight and then turn back over this stretch of the river.

" I have flown fast carrier pigeons along this same bit of water, and they seem to do it in less time than the swifts. Only last summer, at my place in Scotland, I was sitting on the banks of the river watching some swifts, when a pair of blue rock pigeons came from their nest in the cliff, going out to feed, and they went clean past the swifts going in the same direction.

"Of course presumably the pigeons were in a hurry and the swifts were not, and unless we are certain that both birds are trying their hardest, you cannot accept these things as a test of speed.

"If I were asked to guess roughly at the six fastest flying birds in the British Isles, I should place them as follows :

1. The Peregrine,
2. The Hobby,
3. The Merlin,
4. The Golden Plover,
5. The Pochard,
6. The Blue Rock Pigeon,

and the fastest game bird is undoubtedly the blackcock. I do not know, however, if a capercailzie would not beat him if you could get them both to take a long flight across the open, because, generally speaking, in the case of birds of similar shape and species, the heaviest bird is the fastest flying one."

Captain G. S. Blaine, another falconer of long and varied experience, has also been so kind as to give me his opinion on this question. He writes :

" I cannot say whether a peregrine falcon could overtake and kill a swift, but I do not think it would ever attempt the feat. Falcons do not, as a rule, attack small birds. The male or tiercel will sometimes stoop at them, but more in play than in earnest. The female, I should think, would never attempt to catch anything smaller than a thrush or starling.

" It is very difficult to estimate the relative speed of different birds. To do so, one would have to judge correctly of the time taken in passing a measured distance on a straight course. Very few birds, especially swifts, fly absolutely straight ahead.

" A hobby has been known to catch swifts and swallows, and possibly a merlin would do the same.

" A peregrine can fly faster than a merlin, but it would not be so quick in turning and following a bird.

" I think a peregrine can fly faster than a teal or golden plover, though, as you observe, the latter are quicker off the mark."

There are very few recorded instances, as far as I have been able to ascertain, in which a hawk has killed the common swift. In two of these there was no evidence as to whether the hawk had not taken the swift by surprise. But there is at least one recorded instance in which a swift has been killed by a hobby in fair flight. This is to be found in that delightful book, *Field Studies of some Rarer British Birds*,[1] by Mr. William Walpole Bond. The description of the race is so vivid that, with the author's kind permission, I reproduce it here.

" On June 14, 1907, as I lay in a spacious clearing of a big Sussex woodland, a sudden swirl of wings gave me instant pause in my meditations. Looking up, my eyes were held by a swift coasting earthwards in frantic haste, hotly pursued by a hobby not many yards in his wake. I literally held my breath with excitement, for here was an occurrence of dreamland only. Speeding on about a level with the tree-tops both birds measure the length of the long glade in fractional time, and the hawk gains almost imperceptibly.

" Then the pursued makes a mighty effort; he rises gamely, even slightly increasing his lead. Indeed it seemed he might shake off his deadly courser. Alas, my friend, it is to no purpose;

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[1] Pp. 258-259 (Witherby & Co., London, 1914).

the hobby has responded to your challenge, and now exhibits speed for which — glorious flier though he be—I should never have given him credit. Mounting with ease above his prospective prey, the lithe hawk compels him to describe an arc and once again to start a life—or death—struggle in a headlong slant across the clearing. That flight is his last—the swift has shot his bolt. Now inches only separate the birds, you could cover both with a very large handkerchief. Next instant the hawk rises straight and stoops strongly, pursuer and pursued become one. Binding to his quarry the hawk is away over the trees at my back without so much as the most momentary pause in the continuation of his eminently successful 'shikar.' Indeed, this continuity of action was possibly the most pleasing part of a praiseworthy performance, since you might reasonably have expected a break—however trivial—after what must have been a long and arduous chase. As a fact, the death-stroke was so featly and rapidly administered that, except that where a moment before there had been two birds there was now only one, and that a muffled clap and a few small dusky feathers twirling aimlessly in the summer breeze suggested some sort of untoward happening, it was difficult to realise that anything unusual had taken place.

" I have seen the irresistible death-stoop of the peregrine, the lightning rush of the tiny merlin, I have watched the earthward plunge after prey of buzzard, eagle, kite, and harrier ; I have revelled in the agile snatch of the sparrow-hawk, in the silent hovering of the kestrel ; and all have I enjoyed. Here was something quite different and even far better. Never have I seen skill so superb as was displayed by that hobby."

It would therefore seem that the hobby, which is a peregrine in miniature, flies faster than the common swift even on a horizontal flight, but it is worthy of note that in both stoops referred to in this delightful description, the hobby gained by reason of gravity. True, he also gained altitude, but this may have been better manœuvring for position and not necessarily a greater speed. As the peregrine flies faster than the hobby, being a bird of the same structure but larger, the peregrine could no doubt overtake and kill the common swift if it would take the trouble to pursue so small a bird.

Next, as to the Alpine swift. This bird is much larger than the common swift—in length

8 inches as compared with 6·75 inches—whilst their wings are 8·45 inches and 6·8 inches respectively, and as the two birds are of the same structure, one would naturally expect that the Alpine swift would be much the faster flier. The flight of the Alpine swift, like that of the blackcock, which is probably the fastest flier amongst game birds with the possible exception of the capercailzie, is very deceptive.

Colonel Meinertzhagen, in the article already mentioned, describes some observations from an aeroplane in regard to the flight of a large flock of common swifts feeding at an altitude of 6000 feet over Mosul in Mesopotamia. He describes how they circled round the aeroplane, which was flying at 68 miles an hour, and easily overtook it. In commenting on this case he says : " The case of the Mosul swifts is interesting. The birds were probably not on passage but simply feeding. It is known that swifts travel great distances in search of food and ascend great altitudes.

" In the Middle Atlas of Morocco, in the Himalayas, in Crete, and Palestine, 4000 or 5000 feet and 50 miles or so in distance seems nothing to these incomparable fliers. I have had splendid opportunities of observing the Alpine, common, and spine-tailed swifts (*Chaetura*), and it has been a great disappointment to me that I have never been able to get a satisfactory estimate of their rate of flight, as they never continue on a level course. On a small island on the coast of Crete I was recently given a good exhibition of what an Alpine swift can do. I was watching some of these birds feeding round cliffs in which several pairs of Eleonora's falcons were about to breed. Now, this delightful falcon is no mean flier, and as these swifts passed their cliff, the falcons would come out against them like rockets. The swifts would accelerate and would seem to be out of sight before the falcons were well on their way. So confident were the swifts in their superior speed, that every time they circled round the island they never failed to 'draw' the falcons, and seemed to be playing with them. I may add that these same falcons have little difficulty in overhauling and striking a rock-pigeon—itself no mean performer. I have also seen on record the case of falcons and swifts somewhere in India, where the former failed time after time to come up with his quarry. I, unfortunately, cannot trace the reference.

"I hesitate even to guess at the speed to which a swift can attain when the necessity arises, but the main point is that this, the fastest of birds, can increase his feeding speed of, say, 70 miles per hour, to a velocity which must exceed 100 miles per hour."

In the tables given above[1] Colonel Meinertzhagen estimates the speed of the normal and migratory rate of flight of falcons at 40 to 48 miles an hour, whilst Captain Portal estimates the maximum speed of the peregrine falcon in level flight through still air at 62 miles an hour. Captain Portal adds that the speed given is for a good trained bird, and that a wild bird is faster.

In view of Colonel Meinertzhagen's observations from his aeroplane and the figures given above, it would appear to be certain that the Alpine swift is faster than the peregrine falcon in horizontal flight.

We have now to consider the speed of the spine-tailed or needle-tailed swift. There seems to be no doubt that this bird is a much faster flier than the Alpine swift, though at first sight and without a careful examination of the skeletons, it is difficult to state why this should be so. I have compared various specimens of the two birds, and there appears to be little difference in their size. Colonel Meinertzhagen, who has been so kind as to discuss the subject with me, agrees that the spine-tailed swift is the faster flier, and tells me that he thinks it is probably the heavier bird of the two, and that this may account for its greater rapidity of flight.

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[1] Pp. 35, 36.

The wing of the Alpine swift is 8·45 inches, that of the spine-tailed swift is 8·1 inches. The length of both birds is 8 inches,[1] although Dresser [2] gives the total length as 8·5 and that of the spine-tailed swift as 8·1 inches.

The genus *Chaetura*, to which the needle-tailed swift belongs, is easily distinguishable from the genus *Apus* (to which the common swift and Alpine swift belong) by the wedge-shaped tail in which the shafts of the feathers are longer than the webs and protrude like spines. The tail in the only species (*Chaetura caudacuta caudacuta*) occurring in the British Isles, compared with that of the Alpine swift, is very short. It is almost square, and has ten feathers, which are very stiff and the shafts of which project 4-6 mm. (·156-·234 inch) beyond the web in a stiff point like that of a needle or spine.[3]

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[1] *Manual of British Birds*, by Howard Saunders, 2nd ed. (Gurney & Jackson, London), pp. 264, 266.

[2] *History of the Birds of Europe*, by Henry E. Dresser, F.L.S., F.Z.S. (1871–1881), vol. iv. p. 617.

[3] *A Practical Handbook of British Birds*, edited by H. F. Witherby, vol. ii. pp. 7, 9. Witherby & Co., London, 1920.

The shafts of the primaries are very strong and the wings very long. Gould[1] says, in reference to the spine-tailed swift, in a passage which is quoted in Seebohm:[2] "The keel or breast bone of this species is more than ordinarily deep and the pectoral muscles more developed than in any of its weight with which I am acquainted." Probably the last-mentioned facts largely account for its superiority in speed over the Alpine swift.

In an article entitled "The Twelve Swiftest Birds of Australia,"[3] in which Mr. E. S. Sovenson gives the views of himself and various friends of his as to the relative speed of Australian birds, he says that after long observation he and they have no hesitation in stating that the spine-tailed swift is the swiftest Australian bird, and states that its speed has been computed at 180 miles an hour.

"Besides its swiftness," he writes, "it is almost tireless of wing, being second only in that respect to the frigate bird, the bird of eternal flight. Both have very long wings in relation to the body—an indication of rapid flight. The swift, a bird of passage which crossed the wide sea after breeding in Japan, is not known to alight in Australia, where it spends a considerable time hunting its insect prey in the upper air."

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[1] *Handbook to the Birds of Australia*, by John Gould, F.R.S. (1865), vol. i. p. 104. London.

[2] Vol. ii. p. 305, Porter, 6 Tenterden Street, W.; Dulau & Co., Soho Square, W., 1884.

[3] *Avicultural Magazine*, Third Series, vol. x. No. 4, February 1919, pp. 73-74.

In *A History of the Birds of Europe*,[1] Dresser writes: " The present species (*Acanthyllis caudacuta* or *Chaetura caudacuta caudacuta*) and *Acanthyllis gigantea* are said to be the swiftest birds in existence. Tickell says that he never witnessed anything equal to the prodigious swiftness of its movements."

Chaetura caudacuta cochinchinensis (which is to be found in Malacca, Sumatra, and Cochin China) is a form of the spine-tailed swift allied to that species (*Chaetura caudacuta caudacuta*) which is so rare a visitor here. I have examined and compared numerous specimens of these three species of spine-tailed swifts, and it would seem practically certain, in view of their similarity in size and structure, that their speed must be similar.

Mr. E. Stuart Baker, who has made experiments as to the speed of the *Chaetura nudipes* and the *Chaetura cochinchinensis*, writes:[2] " Both these species have a normal flighting speed of something very nearly approaching 200 miles an hour, enormously in excess of the powers of any other bird with which I am acquainted. In North Cachar, Assam, these birds used to fly directly over my bungalow in Haflang, flying thence in a straight line to a ridge of hills exactly two miles away, and when over the ridge at once dipping out of sight. We constantly timed these swifts and found that stop-watches made them cover this distance in from 36 seconds to 42 seconds, *i.e.* at a rate of exactly 200 miles an hour to 171·4."

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[1] Vol. iv. p. 616.

[2] *British Birds Magazine*, vol. xvi. No. 1 (June 1, 1922), p. 31.

Writing of the *Chaetura nudipes* Mr. W. T. Blanford, F.R.S., says:[1] "This and the other large spine-tails are, I believe, absolutely the swiftest of living birds. Their flight far exceeds that of the Alpine swift, and I doubt if any falcon can approach them in speed. They are generally seen in scattered flocks that play about for a time and disappear at a pace that must be seen to be appreciated."

The same ornithologist refers[2] to the *Chaetura*

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[1] *The Fauna of British India including Ceylon and Burma Birds*, vol. iii. p. 173. Published under the authority of the Secretary of State for India in Council. Taylor & Francis, London, 1895.

[2] *Ibid.* p. 174.

indica or brown-necked spine-tailed swift, which is a larger species (length about 9 inches, tail 2·6—wing 8—tarsus 6·8), as being " equal or possibly even superior in speed to *Chaetura nudipes*—so wonderful is their flight that Mr. H. R. P. Carter remarked that a flock of Alpine swifts, passing over immediately after some of the present species, ' seemed to fly like owls after the arrow-like speed of the spine-tails.' "

I think, therefore, that if the speed in horizontal flight is alone to be considered, the spine-tailed swift is the fastest bird which flies in the British Isles, that the Alpine swift comes next; then come the northern falcons (or as they are usually called, gyr-falcons) and the peregrine falcon, in the order named, except in the case of a very short flight, in which case the Golden Plover and teal, being faster off the mark and better sprinters, will fly more quickly than the falcons, though they will, when the latter really get going, be gradually overtaken.

There remains for consideration the speed of the golden eagle and falcon in their downward flight, when stooping at their prey. There is no certain method of comparing their respective speeds in this unique kind of flight either with one another or with the speed of other birds which never fly in this way. In considering the question of the relative speed of the two birds in this particular kind of flight, I will first deal with the matter on principle and then consider such evidence of eye-witnesses as I have been able to obtain. The falcon has of course one great advantage over the eagle as regards equipment for swift flight. He has the long pointed wings typical of the true falcon, whereas the eagle has rounded wings. As between birds of similar size and spread of wings, the bird with pointed wings is faster than the one with rounded wings. Thus a blackcock is undoubtedly faster than a pheasant although their bodies are about the same size, or to be more accurate the blackcock is rather smaller than the pheasant. A striking instance of this was recently given in the *Field*[1] by Mr. G. Denholm Armour, who wrote: " Some years ago a friend asked me to come to Argyllshire late in the autumn to shoot some black-game which lived in the birch and fir woods hanging along the lower parts of the hills.

" Our method was to place ourselves in a break in the line of woods at the bottom of the hill, sending two or three men to drive the wood towards us. The result was usually very high birds flying downhill and very fast. On several occasions at the same time came a blackcock and a cock pheasant, of which there were a few in almost every drive. Incidentally, most of the pheasants we shot were old birds with long spurs, so were very strong on the wing. In each case—and I noticed several—the blackcock outflew the pheasant by what seemed to be about 50 per cent in pace, leaving him as a racing car would a ‘ runabout.’

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[1] March 15, 1923.

“ The chance of comparison was very interesting, being between birds of much the same weight and size, both started under the same conditions, and I think ‘ doing their best.’ Had the blackcock come alone, I think his much slower wing beat would have made one think him the slower flier of the two.”

The blackcock and grouse have wings exactly alike—but the blackcock is heavier than the grouse and much faster.

With the exception of the difference in the wings mentioned above, the structure of the eagle and falcon is very similar, and as has been pointed out, the larger of two birds of similar structure once it gets going is almost invariably faster, owing no doubt to its superior muscular power and driving force.

In comparing the downward flight of the eagle and falcon it is also necessary to recollect the advantage which the former has by reason of its much greater weight.

It is difficult to obtain thoroughly reliable records of the weights of the golden eagle and the different falcons; but so far as I can ascertain, the weight of the eagle varies from 8½ to 12½ lb., that of the gyr-falcon from 3 to 3¾ lb., and that of the peregrine from 2 to 3 ounces under 2 lb. to 2¾lb., in each case of course the female bird being heavier than the male.

But for the resistance of the air, all bodies, light or heavy, small or large, would fall at the same rate. In fact, however, as velocity increases a notable air resistance is set up which increases rapidly. The velocity of a body falling freely *in vacuo* is over forty miles per hour at the end of two seconds, over sixty at the end of three seconds, and so on.

We all know by experience the great force exerted by a wind of a velocity even as low as thirty miles an hour, which most people would call a hurricane. But it is not perhaps so generally known that in proportion to its weight, other things such as shape and specific gravity being similar, a small body experiences much greater resistance than a large body. The resistance of the air to the fine particles of vapour which constitute a cloud is such that they only fall at the same rate of a few feet per hour. And in the case of two birds of similar shape and specific gravity, but one eight times the weight of the other, the larger bird would ultimately attain a velocity roughly twice as great as the other, if both fell for a sufficient distance to attain their limiting velocities, *i.e.* the velocity at which the resistance offered by the air is equal to the attraction of gravity. Similarly if the one bird were four times the weight of the other, the velocity ultimately attained under the conditions mentioned would be roughly one and a half times as great as the other.

In " Notes by an Old Stalker " in the *Field* for September 9, 1922 (p. 370) there appears the following interesting account of a duel between a golden eagle and a peregrine which the writer himself witnessed :

" Although by a long way our most powerful bird, the eagle is by no means a match for some much smaller combatants. Once I saw an eagle soaring placidly along when from a range of precipices immediately below him a falcon shot up into the air. Without a moment's hesitation he attacked the giant bird. The eagle at once joined combat, and through the telescope I could see his efforts to hit his adversary with beak and wing. One blow from either and it would be all over with the falcon ; but the latter evidently realised this and regulated his tactics accordingly. The movements of the eagle were slow and cumbrous compared to the rapid action and lithe activity of his adversary. Every time he dodged the eagle's stroke and, wheeling rapidly, got in his blow before the huge bird could recover himself. That the eagle was in a great rage was evident, for I could hear him emitting sounds that resembled nothing so much as the bark of a terrier. Finally, realising the hopelessness of the contest, he took to flight. I previously knew that the eagle was fast on wing, but the speed he now exhibited was a revelation to me. With half-extended, half-curved wings, showing never a tremor, he cleft the air straight as a bullet. The falcon pursued, but, being left hopelessly behind, soon gave up the chase."

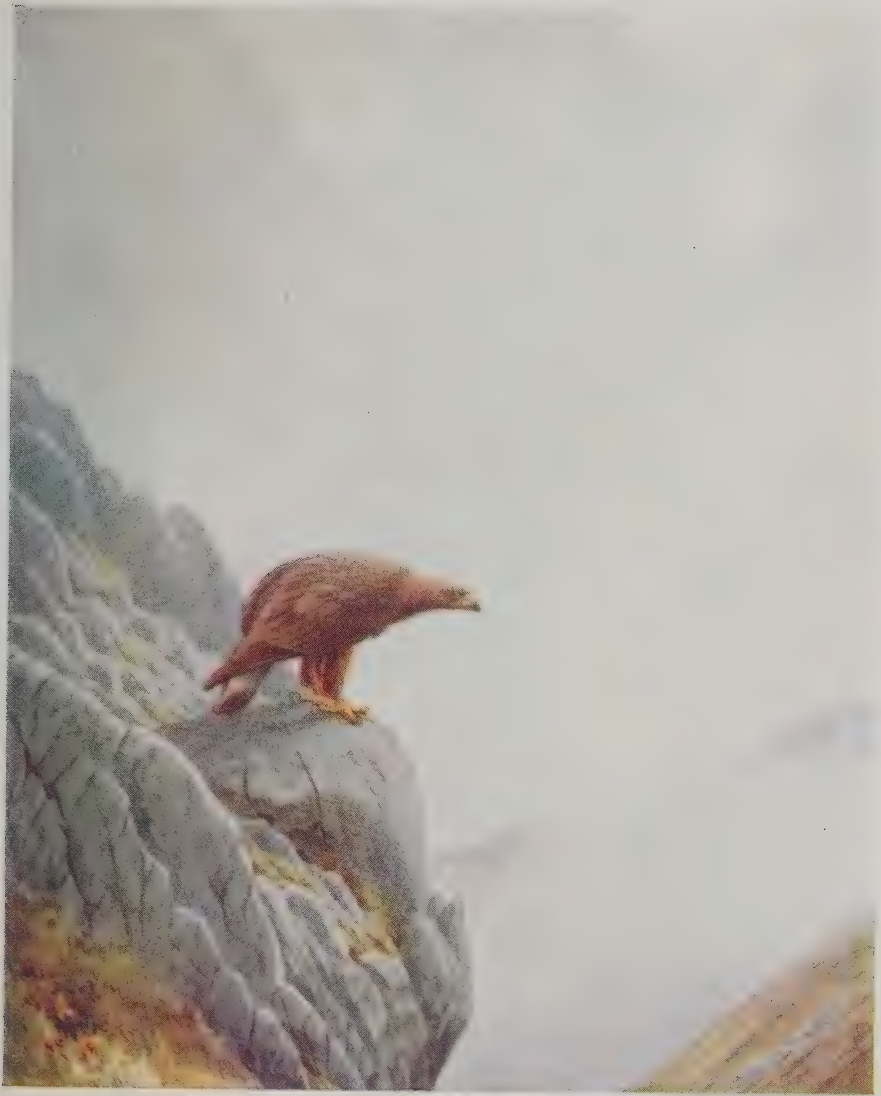
The flight of the eagle here described was obviously a glide or downward flight, when, as I have pointed out, gravity would assist his speed to a greater extent than it would in a bird of less weight—the peregrine.

In the case of a bird of prey descending from a height on its quarry, the nearer its downward flight is to the vertical the faster will it descend. In coming down on its prey, neither the eagle nor the falcon completely closes its wings, probably because if it did so, it would lose control. This is also true of the gannet or solan goose, which has been described as the largest and noblest-looking of our sea fowl. The great speed which a bird of large size can attain in downward flight can to some extent be realised by watching the gannet when he drops head first as he descends perpendicularly on to the fish in the water. I have carefully examined and compared the skeletons of the eagle and peregrine and have tried to form some idea as to the relative muscular power and driving force of the two birds, and bearing in mind the facts stated above, and the greatly superior size and weight of the eagle, it seems reasonable to conclude on principle that the eagle is probably faster than the gyr-falcon or peregrine in a downward flight, assuming that both birds are putting forth all their powers.

As regards the evidence of eye-witnesses, I have discussed this question with many stalkers. The majority of them have never seen the eagle stoop at its quarry and strike it a blow which sends it to the ground as the peregrine so often does—though they have seen the eagle seize its quarry in the air or pounce on it on the ground and carry it off. Only a few of these, however, have any doubt as a result of what they have heard from other stalkers and keepers that the eagle on occasion does adopt the former method.

It is, however, an undoubted fact that although the eagle generally captures birds which he is pursuing by seizing them in his talons or, to use the falconer's term, binding on them, he occasionally stoops on and strikes them in the air, sending them hurtling to the ground in the same way as the peregrine does.

The reason why the eagle so rarely adopts this method is probably because it can secure its prey without doing so, and further if it were to exert all its powers when descending from a considerable height at an angle near the vertical on a grouse,



THE GOLDEN EAGLE.

By V. R. Balfour-Browne.

blackcock, or ptarmigan (which do not usually fly very high above the ground), it would incur a serious risk of injury in consequence of being carried on by its impetus and dashing against the rocks or ground after striking down its prey.

The interesting, and I think significant, fact is that although some of these stalkers with whom I have discussed the question think that the peregrine probably flies faster than the eagle, every one of them who has seen the eagle kill its quarry in this way (and I know several) has told me that in his opinion the eagle in its final rush is faster than the peregrine. It is also important in this connection to bear in mind the fact on which Major Radclyffe lays such stress—that it is an optical illusion to imagine that a smaller-sized bird is flying faster than a larger bird of similar shape and make, and that, as he says, ninety-nine sportsmen out of a hundred would probably tell you that a snipe flies faster than a woodcock—whereas the converse is true. An old keeper in the North, whom I have known for many years, told me that he had seen the eagle stoop at and strike his quarry in this way on two occasions, and that it moved in its final downward flight with the same lightning-like rapidity as the peregrine.

John Finlayson, the head stalker at Killilan, wrote to me last February as follows: "I have once plainly seen the eagle driving after grouse and striking it down very similar like what the peregrine falcon does. It happened at the north end of Corrie-ach. I was going up to Patt from Mulbuie way. A covey of grouse came tearing down from the low end of Aonachbuie in front of me, about 300 yards away, and an eagle in hot pursuit, wings gathered up, and making a swishing noise; going through the air it struck one down, with a cloud of feathers knocked out when it did so. The eagle glided up a little, then balanced and dropped down where the bird fell; it was a little over a ridge out of my view; when I got up to the place I saw the eagle well up the glen going fast with the bird in its talons."

My gamekeeper, Donald McIver, who has lived all his life in Ross-shire, on one occasion saw an eagle strike and kill a blackcock. This is his account of it. "In the forest of Strathconan, where I was for a number of years, I once saw a very fine sight of an eagle pursuing a blackcock. The blackcock got up at the head of a very deep corrie and came over at a very great height. The eagle was about and soon after it. I could see him overtake the bird, and I would say that he struck him the same way as the peregrine does with his claw. I saw something drop, but could not make out what it was at the time; then the eagle doubled in the air and caught the bird before it reached the ground. None of the other eagles I have seen after their prey have struck it like this in the air. They have always clutched at their prey, but this time the eagle struck the bird and went right past him. I was not far off, and could hear a tremendous noise of the wings. When the eagle doubled back and caught the bird in the air I would judge that the bird would be as high up as three hundred feet, and when he doubled back I should think he was not fifty.

"Perhaps the narrowness of the corrie might be the reason for him taking the bird in the way he did—I went to the place and found the head of the blackcock; there was about three inches of skin hanging to the head, a tear like what would be done with the claw. This is the only time I ever saw an eagle kill a bird in the air, but it was a grand sight. This happened in January 1895, in Corrie Vullin, Strathconan."

This amazing feat in aerial gymnastics is no doubt also performed on rare occasions by the peregrine. One of the most experienced of living falconers wrote to me as follows: "I have seen a very celebrated falcon which I owned for years bring off a remarkable trick several times. She used to strike at the back of the grouse's head, and I have seen her just scalp the grouse, taking a piece out of its skull not as large as a pea, and thus killing the bird in mid-air just as if it was shot; often, when the grouse was high above the ground, I have seen the falcon then take a sharp turn in the air as the grouse was falling, like a spinning leaf, and pick it up in her feet before it could touch the ground—a very wonderful sight."

An old friend of mine, who is head stalker in one of our best-known deer forests and whose veracity I have every reason to accept, told me an interesting story which further illustrates what fine feats in the air the peregrine falcon can perform. He said that on one occasion he saw a falcon strike and carry off a crow. As the falcon was circling higher and higher up, carrying off this crow, it was mobbed by a considerable number of other crows. For some time it ignored them, continuing its steady upward circling flight until

WHERE THE GOLDEN EAGLE REIGNS.

From a Photograph by FRANK WALLACE.

one crow, becoming rather bolder than the rest, provoked the falcon into retaliation. Dropping the crow it was carrying, the falcon stooped on the troublesome crow, struck and killed it and, turning with extraordinary rapidity, caught in the air the dead crow which it had been carrying, and then recommenced its upward flight without further trouble from the crows.

The marvellous speed of the golden eagle and peregrine in their final rush, when stooping from a height at their quarry, must be seen to be believed. Few persons have been so fortunate as to have this opportunity in the case of the golden eagle, although this grand bird is often to be seen in some forests and has no doubt increased in numbers in recent years. On the other hand, there are of course many persons who have seen both the wild peregrine and the trained gyr-falcon and peregrine strike down their quarry.

The well-known ornithologist and wild-fowler, Mr. W. H. Robinson of Lancaster, in a letter in the *Field* of January 28, 1922, after stating from his own experience that the peregrine can overtake the golden plover and the curlew with the greatest ease, says :

" To my mind one of the fastest things I have ever witnessed is the last effort of a peregrine in chase of a wild duck when, fast as is the accelerated speed of a mallard, it seems almost to be standing still in the air when the peregrine stoops over it."

Any one who has seen this, as I am glad to say I have, will assuredly echo these words.

It is of course pure speculation whether, in the comparatively short flight of an eagle or falcon stooping in its final downward rush at its prey, its speed exceeds the maximum speed of the spine-tailed swift. Those, however, who have seen the last effort of the eagle or falcon in a flight of that unique kind will never believe, without scientific demonstration to the contrary, that any other bird in the British Isles can fly faster.

V

A GOOD DAY IN THE FOREST OF COIGNAFEARN

Towards the end of a September several years ago I was so fortunate as to be invited to stalk at Coignafearn, which has always been famous for the size and weight of its deer. On reaching the lodge on a Saturday night, I heard that the head stalker had met with an accident, fortunately not a bad one, but possibly serious enough to prevent his going out with me on the following Monday. He had been out in the forest the day before I arrived, and on going up to a stag to bleed him, the stag had given a sudden unexpected plunge, which had caused the stalker to inflict on himself a nasty wound in his right leg with his knife, which was open in his hand; another instance that no one, not even the oldest and most experienced of stalkers, can be too careful on these occasions. On Monday morning he was much better but not fit to go with me. The season was well advanced, and my host was very anxious to kill the usual number of stags as soon as possible. It was therefore arranged that I should act as my own stalker, and take with me a watcher named Maclennan. I had also two gillies with me and a couple of ponies, and my host told me that he would be only too glad, if I could manage it, if I would kill as many stags as could be brought in. Maclennan had never acted as stalker, but as there is nothing I like better than to do the stalking myself, I was very pleased with this arrangement, for Maclennan knew the ground thoroughly, and I felt sure that his assistance would be invaluable; indeed, without him I could of course have done practically nothing, as the ground was strange to me. We were in the forest and spying by 10 A.M., and very soon we saw a good stag with some hinds. The stalk was unsuccessful, but it was not long before we spied another good stag, and without much difficulty I managed to get into a good position within about 150 yards, and shot him through the heart. He proved to be a good eight-pointer, and weighed 15 stone clean. Shortly after this we spied a large herd of deer which were very restless, continually on the move. There were several good stags in the herd, and these were roaring and fighting and driving the hinds about. Two of them in particular, which looked like the heaviest, engaged in a battle which lasted for some time; but gradually one of them showed signs of being worsted and, watching his opportunity, suddenly turned tail and bolted. It is rarely that battles of this kind end fatally—only once have I met an eye-witness of such an occurrence. The battle was between a switch and a ten-pointer. The combatants were fighting on the side of a hill and were very evenly matched. My informant, the stalker at Attadale, said that after some time the switch, taking advantage of being on slightly higher ground, charged his adversary and, getting past his guard, pierced his side with his antlers. The ten-pointer immediately fell to the ground dead. The stalker ran up and found that the dead stag had been pierced through the heart by his conqueror.

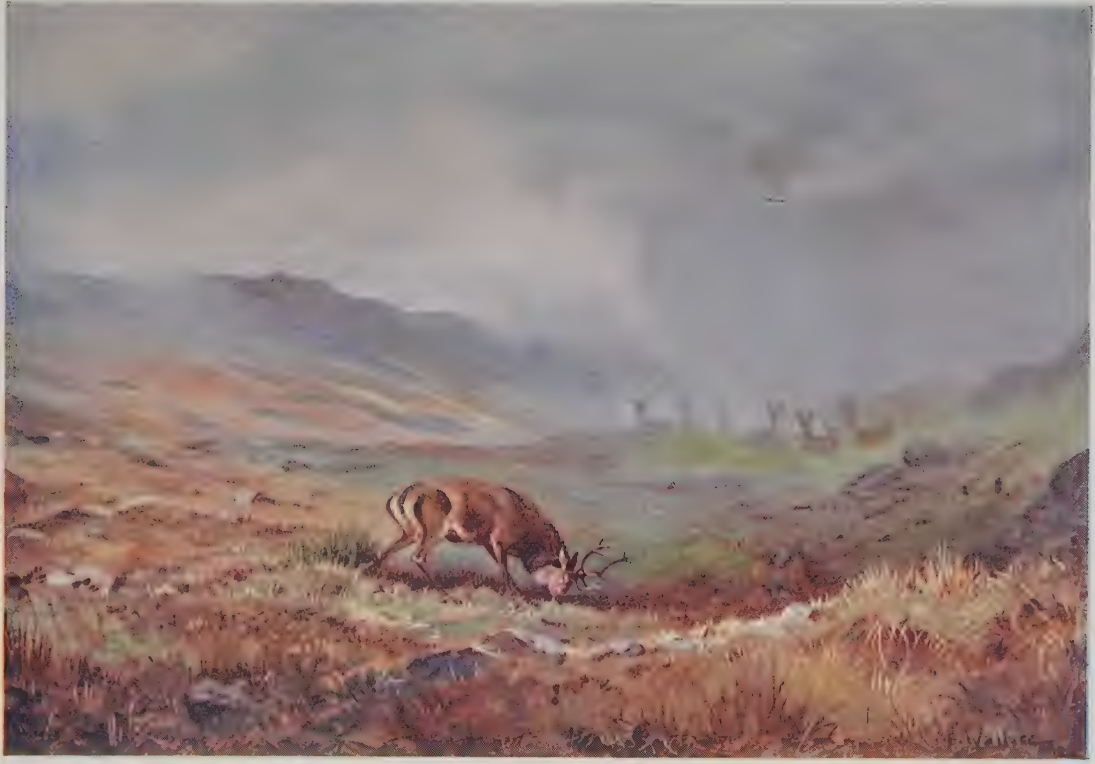
The stag with the best horns is generally not the best fighter and is frequently driven out by a switch-horn or "caberslach," whose long skewer-like antlers are the most effective horns for fighting. The best fighter of all is, however, the hummel—a stag which has no horns at all, and which is in consequence a very heavy beast.

It is astonishing how a stag will sometimes acknowledge himself beaten without any fight at all. I remember when stalking at Fealar that I had been trying without success for nearly two hours to get a shot at a big black stag which was in pursuit of a large number of hinds and was constantly on the move, skirmishing with smaller stags and driving them away. Suddenly we heard the sound of great roaring and saw coming from the direction of Mar Forest a huge red stag which evidently had for its objective the hinds who were in charge of the black stag. The newcomer kept running for a short distance and then stopped to roar and grunt. We thought that by running hard we might reach a point near enough to get a shot at him. We accordingly ran as fast as we could in order to try to cut him off, but in vain.

Before we could get within shot of him he had passed this point we were making for. As soon as he got within sixty to seventy yards of the black stag, who was waiting and every now and then roaring defiantly in answer to his challenge, the latter seemed suddenly to realise that the contest would be hopeless and turned tail and bolted ignominiously, being pursued only for a short distance by his adversary, who then rounded up the hinds and drove them off.

But to return to my story. We tried to stalk the victorious stag, which seemed to be the best beast in the herd, but found it extraordinarily difficult to get within shot of him. There always seemed to be several hinds in the way, and, as it was now getting towards two o'clock, we decided to have luncheon, in the hope that in the meantime the deer would settle down, and that we should then have a chance at the stag we were after. We did not waste any time over lunch and very soon again had the deer in view. They were still on the move and we followed them for some time. The stag which we were after, which we made out to be a nine-pointer, was evidently much troubled by two other stags only a little smaller than himself, and presently, after chasing away first one and then the other, these three stags were between us and the herd. Now at last it seemed there was some chance of getting a shot at the nine-pointer, but before we could get up to him he began again to chase off the other stags, and then turned, and at a good pace followed the herd which was moving away from us. The other stags then also turned and followed in the same direction, though at a respectful distance from the nine-pointer. Maclennan and I, by running and crawling quickly, gradually diminished the distance between ourselves and the deer, and at last, after a quick run when out of their sight, crawled up a small hill and saw the three stags, the nine-pointer watching the other two. The nine-pointer was nearly 200 yards from us when he suddenly stopped and turned, standing for a moment about three-quarters on. I saw that this was my only chance, as the stags were just on the brow of the hill, and in a few moments would almost certainly be out of sight. I therefore decided to take the chance and fired.

" You have him, sir," said Maclennan, as the stag, evidently hard hit, disappeared over the brow of the hill. We made our way as fast as we could over the hill, but saw no sign of the stag.



PREPARING FOR BATTLE.

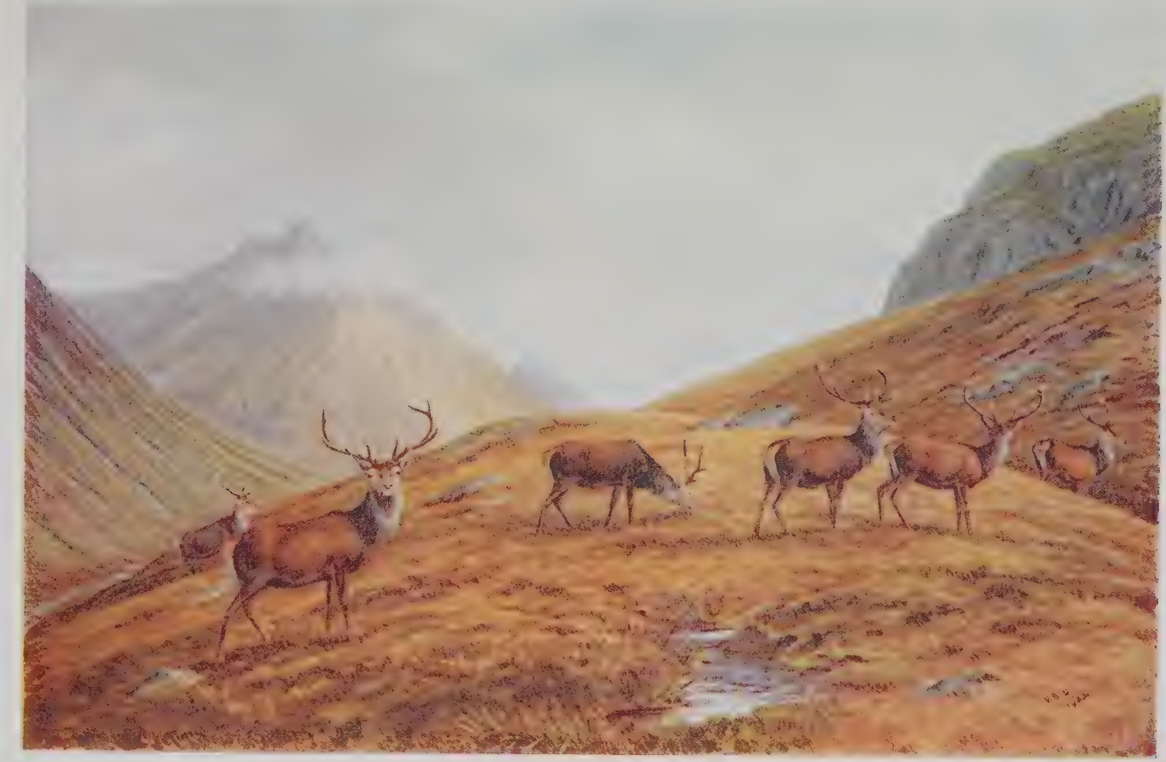
BY FRANK WALLACE.

The ground was rocky and very broken, and I felt sure that he could not have gone far, and was lying down hiding himself. We began to search, when suddenly the stag jumped up from under a rock about some eighty yards from us, and after running for about 500 yards farther lay down behind a rock, showing only the point of his horns. I had not shot at him again, as he was end on, and was evidently in such a condition that he could not go very far. We followed up, keeping well out of sight, but found it impossible to get a chance of shooting, so cleverly had he concealed himself. Whilst hesitating as to what would be the best course to take, the stag suddenly got up again and bolted, but this time he gave me a fair chance of a shot, and I killed him before he had gone more than a few yards. On getting up to him, we found that my first shot was not sufficiently forward, but was a raking shot through the body, and the stag could not in any case have gone very far. He was a good beast with a strong horn, and later turned the scale at 16 stone 9 lb. clean. After gralloching the stag, one of the gillies went off to signal to the ponyman; and Maclennan, the other gillie, and I proceeded to work our way back to the lodge, hoping to get another shot on the way home. We soon spied a good stag with a number of hinds, and, after a long stalk, I got a good chance of taking a quick shot at a little over 100 yards and fired. The stag disappeared. Maclennan thought I had hit him, but I was very uncertain, and think I must have shot over him. A long and careful search on the ground, which was very broken, showed nothing. There was no sign of the stag, nor were there any marks of blood to be seen, and I felt satisfied that I must have missed him, though Maclennan and the gillie had thought otherwise.

We again started to work our way back, and had not gone very far before Maclennan suddenly stopped and brought his glass to bear on the face of a hill about half a mile away. He then said there was a stag with a fine wide head lying down, and that we ought to be able to get close to him without difficulty, as the ground was very broken. I proceeded to stalk this stag, and got without great difficulty within about 180 yards of him, when I saw that he was up and looking very suspicious, and that I should have to take my shot as soon as I could. We quickly got the rifle out of the cover, and crawled to another hillock about 100 yards from where the stag was. Arrived there, I pushed the barrels of my rifle over the top of the hillock and slowly raised my head. The stag was standing nearly broadside on, looking straight at me. I fired. There was a thud as the bullet struck him, and he turned and galloped off, disappearing round a corner of the hill. I felt confident that the bullet had gone home; and we found the stag, who had been, as I thought, shot through the heart, lying dead about sixty yards from the place where he had been standing when I fired at him. He was a ten-pointer, and had a fine wide head with a good horn, and when we got him home we found, curiously enough, that his weight was exactly the same as that of the first stag that I had shot—15 stone clean.

Leaving the gillie to gralloch the stag, Maclennan and I now proceeded homewards, keeping a sharp look-out, and presently we saw a considerable number of stags, which were moving across the valley from one hill to another. We saw that if they were not disturbed they would probably cross a little hill not far from us, at a point from which we could, if we moved quickly, get to within shooting distance. So, running and walking quickly, we reached a spot about 140 to 150 yards from the point at which we expected the stags to pass, and arrived just in time. The stags were moving slowly almost broadside to us in single file, and were passing over a little knoll, at which point I had a fine chance of a shot.

"Take the second one, sir," said Maclennan, who had his glass on them. I was just about to fire when he said: "No, not that one, but the third; he's better." Again I was on the point of shooting when Maclennan said: "Wait, sir, wait; take the fifth, he's the best." Directly the stag topped the knoll I fired, and he ran a few yards and fell down. On coming up to him I found it necessary to give him another bullet through the neck. We found that this stag was by far the best we had seen that day. He was a royal, in splendid condition, and weighed 17 stone 6 lb. clean. He had a magnificent head, with very thick black horns, and long points with white tips. After gralloching him, and tying a handkerchief to his horns to scare the eagles and foxes, we made our way back to the lodge. I had several good days in the forest subsequently, with one or other of the regular stalkers, but none more enjoyable than this one, in which, without the assistance of a regular stalker, I had the good fortune to kill four stags averaging over 16 stone clean, without heart or liver.



"TAKE THE FIFTH, HE'S THE BEST."

By V. R. Balfour-Browne.

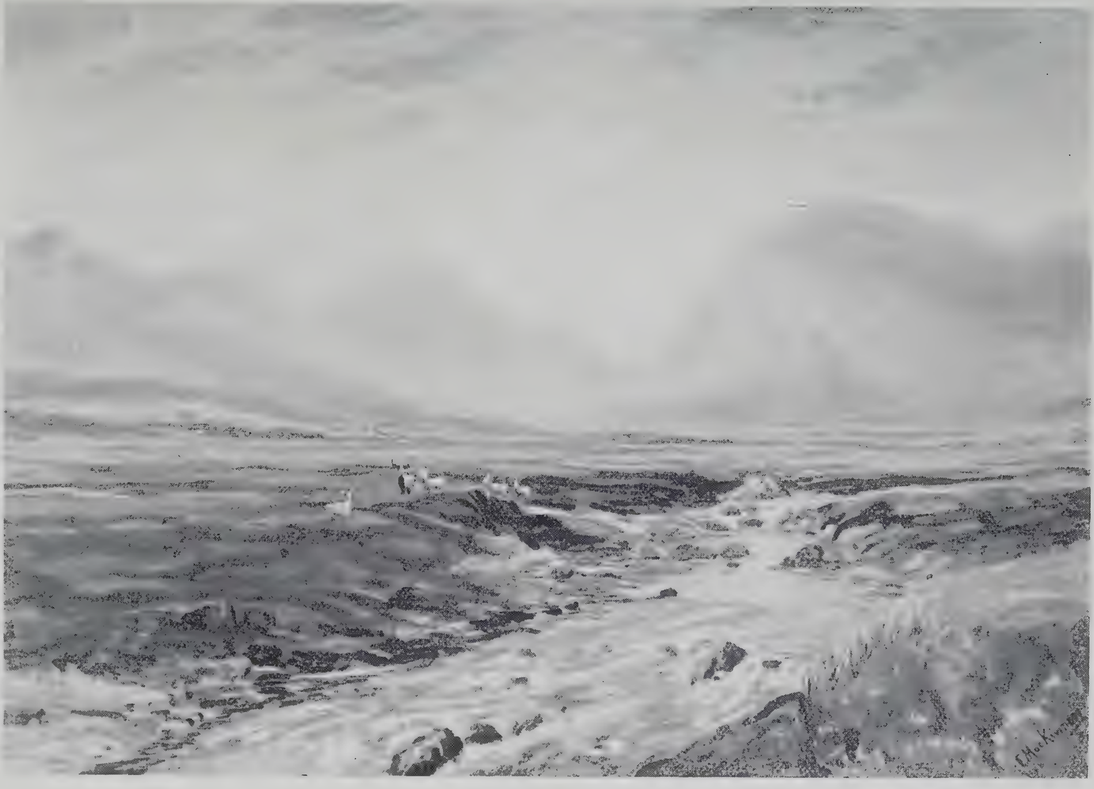
VI

A STALKER'S PERIL

The accident to the head stalker which I mentioned in the preceding article shows that stalking, like almost every other sport, has its dangers, and every one acquainted with the pursuit of deer knows the necessity of exercising great care in approaching them after they have been shot.

A serious accident is, however, very rare, but sometimes even the most experienced stalkers, as in the instance referred to above, incur risks which they ought not to take.

Far more serious than the accident which I have described was one which occurred several years ago, recorded by a former neighbour of mine in the north, the owner of a well-known deer forest. I give the story in his own words, as well as I can remember. " It was late one day in the forest of Fannich, where I was stalking as the guest of one of my relatives who was at that time a tenant of the forest. After a long and difficult stalk, I had succeeded in getting up to the stag and shot it. The stalker, Duncan, an excellent man of long experience, approached the animal to give it the *coup de grâce*, and, with his open knife in his right hand, seized one of the stag's forelegs with his left. Instantly the stag gave a tremendous plunge and threw Duncan back. The knife went into Duncan's thigh, and he bled profusely. Both of us made frantic efforts to stop the bleeding, but without avail. The gillie, who was behind, came up, and we did all we could, but having no medical training, or even a knowledge of first aid, were unable to render useful assistance. Duncan got weaker and fainter, and was apparently bleeding to death. He was, however, perfectly cool and collected, said there was no one to blame but himself,

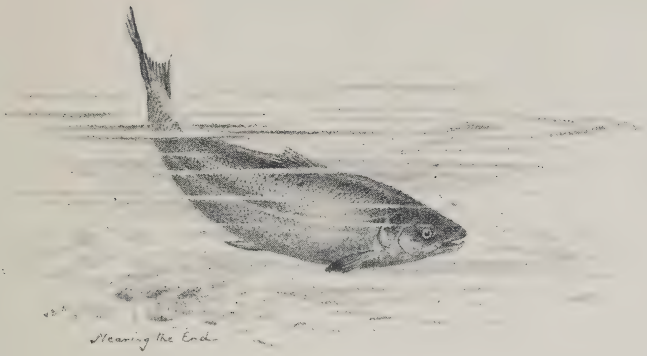


IN THE FOREST OF FANNICH.

By Finlay Mackinnon.

that he was awfully careless, and ought never to have taken hold of the stag in the way he did.

"He appeared to be rapidly getting weaker, and said quite quietly that he thought he was dying, and asked me to take some messages for him to his wife and children, and then seemed to be losing consciousness. It was getting dusk, and the gillie urged me not to wait any longer, as I could do no good, and unless I started for the lodge at once I should not be able to find my way. So with a heavy heart I said good-bye to poor Duncan and started homewards. From time to time I turned to look back at the two men, and at last, when I reached the top of the last hill I had to cross before losing sight of them, I turned to take one final glance. When I looked round, however, I was startled to see, close to the place where Duncan had been lying, the figures of two men walking slowly. There was no mistake about it—they were Duncan and the gillie. I ran back again, and found that soon after I left them the bleeding had stopped quite unaccountably, and Duncan, though still very weak, had gradually revived and finally insisted on trying to walk. We persuaded him to rest, and, leaving the gillie beside him, I went back to the lodge as quickly as I could and sent up a pony. Duncan got safely home, and when the doctor saw him he said it was a marvellous escape, for if the knife had gone into Duncan's thigh two inches from the spot where it entered, nothing could have saved his life."



VII

THE LUCK OF SALMON FISHING

I HAVE always sympathised with the author of the lines known as "The Angler's Prayer," lines which are not so well known as they deserve to be:

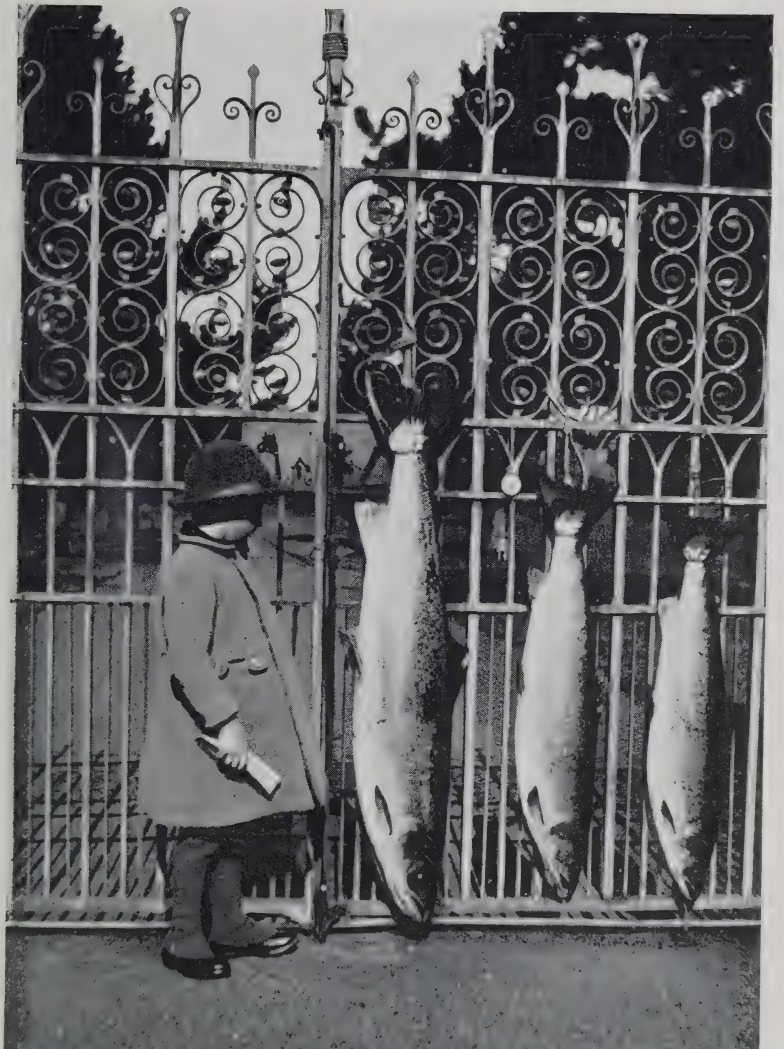
Lord, suffer me to catch a fish—
So large that *even I*
When talking of it afterwards
May have no need to lie.

In the spring of 1921 came the tragedy of my life as a fisherman. I had five days' fishing in the famous river Wye. The river was dead low and my chances of success very small, but I kept steadily at work during the time at my disposal, and on the fourth day had the good fortune, by means of the attractions of a Mar Lodge (size 4/0), to hook a salmon which was not only the largest salmon I had ever seen, but also the largest seen in that year on the beat I was fishing—a most exciting struggle of over an hour terminating in a wild rush of over 100 yards, the wildest rush I, or the keen fisherman I had with me, have ever seen, a grand leap high up into the air of this splendid clean-run fish, and the line came slowly back, the cast having broken a foot from the end. Elsewhere (pp. 12-22, *supra*) I have told of how this splendid fish, no doubt exhausted by the struggle, was shortly afterwards killed by a far greater fisherman than any mere mortal man—an otter. Its estimated weight, as far as could be judged from its remains, was about 40 lb. The day was Friday, April 1, an appropriate day and date for such a catastrophe. In the early part of the following year I received an invitation from the same kindly host to try my luck again in April on the same river, but on another and more famous beat. I gratefully accepted the invitation, and set forth in high hopes and, curiously enough, with a strong sense of expectation, I might almost say the assurance, of great events.

For several days after my arrival the river was so high that fishing was hopeless, but on the morning of April 18, though still high and coloured, it had run down to such an extent as to be in fair condition.

My host was most kind in wishing to give me every possible chance of getting a good fish, and had arranged that I should take with me his butler, C., a first-rate hand at gaffing salmon, who had been with me in the preceding year when I was so unfortunate, and was very keen to help me to kill a big fish. My host sent me to try, first of all, a pool which had a great reputation. This pool is about a mile long, and has to be fished from a boat, trees and bushes running throughout its entire length along both sides of the bank. My host had the fishing on one side of the river only, and on reaching the head of the pool we found some one fishing from the other side. After waiting until this rod had fished some way down the pool, we began operations. I fished the whole morning with the fly, but with no success, and about half-past one, as the river was still so high, we decided to try the minnow, a much more favourite lure than the fly on this particular river in the spring. At my third cast I got a pull, and was fast in what was obviously a heavy salmon.

I never had a more lively fish to deal with. It jumped fourteen times clean out of the water, and, making a constant series of wild rushes, took me at a great pace down the river. Some ladies of our party arrived at the head of the pool about half an hour after I had hooked the fish, and inquired of the fisherman on the other bank whether he had seen anything of me. The reply was, "I saw him fast in a big fish about half an hour ago going round the bend of the river on his way to Hereford." Though I did not get to Hereford, which was nearly thirty miles distant, the fish took me about three-quarters of a mile down the river before I succeeded in killing it, after over an hour's battle. It was a beautiful clean-run hen-fish of 21½ lb. By this time it was nearly three o'clock, and after a hasty luncheon we decided to fish down the lower part of the pool. On our way we had to pass a point where C. had seen a fish rising as we came up in the morning. I fished this place with great care, and about my second cast as the minnow swung round I got a pull and hooked the fish. I had a good deal more of my own way with this fish than with the one I had previously killed, and in about twenty minutes it was in the boat. It proved to be another clean-run hen-fish, and weighed 18 ½lb. The question now was whether we should fish another pool lower down the river or try the head of the same pool again. I decided in favour of the latter course, and we accordingly rowed up to the top of the pool. It was by this time half-past six. My third cast I was into another fish, which did not show itself for a long time. It took me down the river like the fish I had hooked in the morning, but was not nearly so lively in its movements. It kept low down in the water and adopted boring tactics. After rounding the corner, as my fellow-angler would have said, bound once more for Hereford, the fish made a violent rush and plunge, showing itself to be a very big fish and looking not unlike the fish I had parted company with a year ago. We continued to go steadily down the river, the fish making strong rushes, but keeping down and moving about in a stately, heavy fashion. We gradually reached the spot where we had gaffed the 21½-pounder in the morning, our movements being watched by the ladies of our party from the opposite bank. The fish showed little sign of giving in, and about 8 P.M. the spectators on the bank, seeing no likelihood of the battle being ended at present, went home. About ten minutes later the fish began to show unmistakable signs of exhaustion. After it had turned on its side two or three times, I managed to bring it near the boat, which C. had moored near the bank. Just before the fish came within reach of the gaff it made another short rush, and once more turned on its side. Again I coaxed the great fish towards the boat. Nearer and nearer he came, and then in a moment C. had the gaff in him, and with a mighty effort lifted him into the boat. The fish was a cock-fish, and weighed 38½ lb. After examining him we came to the conclusion that he was about the same size as the one I had lost in the preceding year, but probably longer. He had evidently been wounded in his side by a seal a fortnight previously, and though this wound had healed, it must have caused the fish to lose several pounds' weight. When hung up beside the other fish of 21½ lb. and 18½ lb. he looked huge, and had the advantage of some inches over my little grandson, who was nearly five years old. His length was 50½ inches and girth 24 inches, and had it not been for the wound inflicted by the seal he would, no doubt, have turned the scale well over 40 lb. So ended what was for me a day never to be forgotten. I had six more days' fishing, and



"HE HAD THE ADVANTAGE OF SOME INCHES OVER MY LITTLE GRANDSON, WHO WAS NEARLY FIVE YEARS OLD."

From a Photograph by Mrs. Noel Wills.

killed five more fish, two of them with the fly. The other five fish weighed 22½ lb., 17½ lb., 17½ lb., 16½ lb., and 15½ lb. respectively.

Strange that I should have had such good luck. Strange, surely, that though others far more skilful and experienced than I am should have fished the same beats in that river and fished many more days than I did in each year, such a great fish should have come my way in two successive Aprils, on each occasion by far the largest seen or heard of in the season on the beat in question. An old friend of mine, who has fished the same river for many years, and is an angler of great experience and success, told me that he has never killed any fish in that river or anywhere else larger than 25 lb. Surely, indeed, I was the spoilt child of the fishing deities.

At the close of this red-letter day two thoughts crossed my mind—first, whether the fact that so many of my kind friends had earnestly wished that I might on this occasion kill a fish as large as the one I had lost a year ago had really been a factor in my good luck. Who can tell? The other thought which crossed my mind last year also when the great fish parted company with me was that every fisherman must surely be " a man that fortune's buffets and rewards has ta'en with equal thanks." Yet, as one of the keenest fishermen and gillies I have ever known, and who has now gone to his long home, used to say, "It's easy talking and no easy doing."

A few days later my host added still more to my indebtedness to him by giving one of my daughters, who had never killed a salmon, though a very successful angler for big trout, the chance of trying the river.

On her first and second days she drew a blank, but on the third day killed three fish weighing 20 lb., 19 lb., and 15 lb., all on the same fly, a silver doctor. Who says there is nothing in luck? The day I killed my big fish was the third day in the third week of the third month of the fishing season; he was the third fish killed on that day, and I hooked him at my third cast. My daughter killed her three fish on the third day she was fishing. Well might Falstaff (*Merry Wives of Windsor*, Act V., Sc. 1) say: "This is the third time—I hope luck lies in odd numbers." My daughter's performance was far more satisfactory in every way than mine, for fishing with the fly is, of course, incomparably superior to fishing with the minnow—at least, nearly every angler I have met says so. I venture to think, however, that my friend, Arthur Chaytor, K.C., one of the most accomplished and skilful of salmon fishers, in his delightful book, *Letters to a Salmon-Fisher's Sons*, is altogether too severe in his castigation of minnow-fishing. " Avoid minnow-fishing for salmon," he says (page 89), " as a canker that will eat into some of the very best days of your fly-fishing." But need it do so? " It is a dangerous thing for you to begin its use."

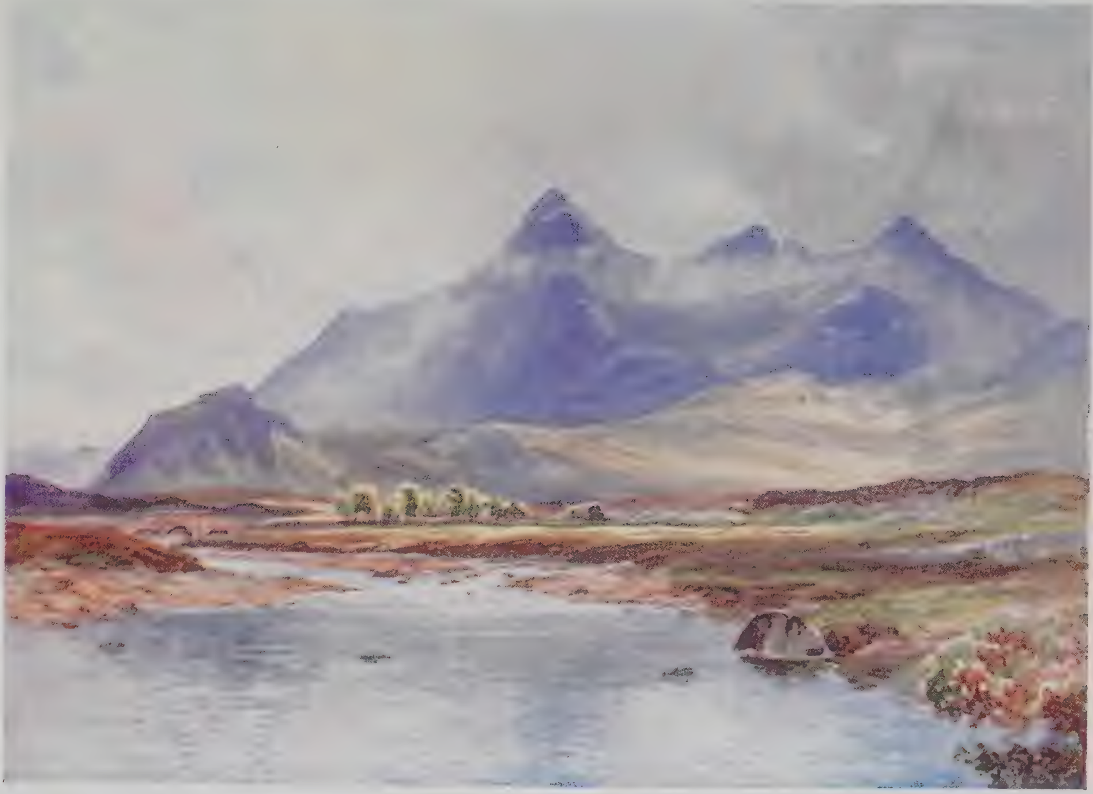
Then in a most entertaining passage he describes how " the river has cleared and has become perfect for the fly. It ought to be a tip-top day, but you are tempted of the devil to try just for an hour the phantom minnow . . . and then you go on with the minnow all the day long . . . dragging out the fish . . . and at the end of the day feeling that you have been rather a butcher than a fisherman and that you might almost as well have used a net." This means, of course, that success in minnow-fishing is simply a matter of luck, and does not depend on the fisherman's skill. In a later passage he describes in most forcible and amusing language " the relapse to minnow, when after a good day minnowing you find next morning that the water is right for the fly and you resolve to make it a day of fly only. You put on your best fly and you begin, full of hope. For an hour or two you cover much water without a single rise, and you begin to doubt whether the fish mean to take at all to-day. Soon, just to see whether they will move at all, you put up the spinning-rod just merely to have one try down the pool. A fish takes the accursed thing and you are lost. Abandoning all sense of decency, you pursue the horrible craft, and at dusk you stagger back to the fishing-hut with half a dozen great fish upon your back and with your conscience hanging about the neck of your heart, which keeps on protesting in vain that this was really no day for the fly."

Even Chaytor, however, admits that " in a cold, wet season, when the river is in flood for weeks together, with only odd days when fishing is possible, the minnow can be really and legitimately useful." On the other hand, in contrast to the above warnings and diatribes, Mr. J. Arthur Hutton, who is so well known, particularly in connection with the Wye, and is, of course, a most experienced and successful salmon fisher, as well as one of the most learned in the life-history of the salmon, describes spinning for salmon as " a form of fishing requiring a very large amount of skill and experience which may provide one with sport on those many occasions when the fly is useless . . . a fine art which requires much practice and long experience, far more so than fly-fishing." " For every good hand with the spinning-rod," he says, " you may find twenty who are excellent fly-fishermen."

I remember a friend of mine in the north, whose old keeper had been with the family for many years and known him since his boyhood, telling me that he knew so well the old man's contempt for and abhorrence of minnow-fishing that he did not dare to use the minnow when the old man was out with him, and never allowed him to know that he did use it. This old keeper would have applied Chaytor's epithets to minnow-fishing on every occasion, but would never have agreed with him for a moment that even on rare occasions it can be legitimately used.

Those like the old keeper—and I doubt if in these days there are many such—might, to use Mr. Hutton's words, " seriously consider whether they might not add largely to their sport and also to their opportunities of fishing by learning to spin for salmon. The river is not always in fly order ; there are many occasions on which the water is too high or too much coloured for the fly when salmon might be caught with a minnow or other bait. In the same way, in deep sluggish pools, when it is almost impossible to work a fly effectively, a bait properly used may effect wonders."

What, then, is the conclusion of the whole matter ? It is this, paraphrasing the words of the famous authority on all things piscatorial, Mr. H. T. Sheringham : "It is certain that good luck is the most vital part of the equipment of him who would seek to slay the big (salmon). For some men I admit the usefulness of skill and pertinacity ; for myself I take my stand entirely on luck."



SLIGACHAN, ISLE OF SKYE.

By Finlay Mackinnon.

VIII

A STORMY WEEK IN THE FOREST

Amongst my stalking experiences I shall always remember a week which I once had early one season in a famous forest on the west coast, through the kindness of my friend the proprietor, to whom I have been indebted for many excellent days' sport. I have had long experience in stalking, but have never known worse weather than we had in this particular week. The rifles consisted of my host, Stuart a fellow-guest, and myself. I was out stalking six days. On Thursday, our first day, we killed five stags between us. My host and Stuart each got two, while I got one. So far as my experiences on that day were concerned, I had no opportunity of a shot until near the end of the day, when we came upon two stags, one of which I shot. As it was late in the day and I had only one pony, I did not shoot at the second stag. The following Friday, Saturday, and Monday were terrible days of mist and storm. The mist never left the tops of the mountains all day long, although there was a strong wind blowing—it appeared to come up from the sea in great banks; and although we waited on each day for it to clear off, we did so in vain. On Friday and Saturday I never had a shot.

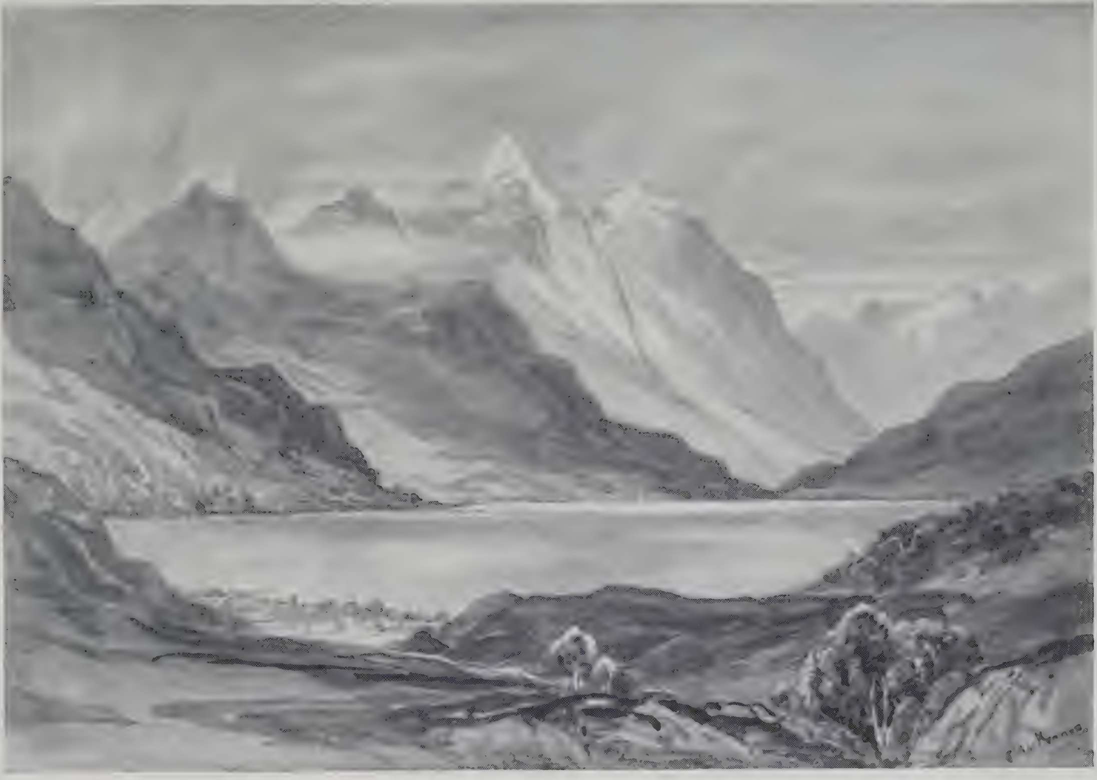
On Monday, until late in the day, it looked as though I was to have the same experience. About four o'clock, however, having been lying on a ridge overlooking a wide, deep corrie, the mist suddenly lifted for a very few minutes and we spied some deer moving downwards on the far side of the corrie, and amongst them what appeared to be two or three good stags. There were also a number of hinds rather nearer to us than this lot of deer. We decided that the only way in which we should be likely to get a shot at the stags would be to go right round the upper edge of the corrie and try to get in between the hinds and the other lot of deer amongst which were the stags. This entailed a most uncomfortable walk; the

"LYING ON A RIDGE WE SPIED SOME DEER."

From a Photograph by the Author.

wind was so strong that one could hardly stand, it was quite impossible to keep a cap on one's head, and it rained or hailed incessantly. At last we got round, and went down to the lower ground; we then managed, with a good deal of difficulty, to crawl safely past the hinds, and found that the other lot of deer were moving slowly, feeding downwards. After a time the deer lay down on a small hill in a sheltered place, and we crawled up to the top of an adjoining hill about 140 yards distant. We there made out that there was one good stag, an eight-pointer, who was lying down, and whose horns only could be seen from the place where we were lying. I got into position to shoot in case the stag should rise and give me a chance. It was now about half-past five, and we thought, considering how late it was getting and the conditions of the weather, that we should not be kept waiting very long. The stag, however, did not move for about half an hour, when he got up and turned round, and immediately lay down again. Time went on, and what with the cold and wet I began to shiver, and felt that I must do something to alter the condition of things. It was close on 6.30, and we were five miles from the point where it had been arranged that Stuart and I were to meet the car, if possible, at six o'clock, and in any case not later than seven. I told the stalker that he must get the deer up somehow or other, and that he had better whistle them up ; he strongly advised me not to do this, but to wait a little longer, as, if we did so, they would probably bolt and not give me a chance to shoot. I, however, persisted, and said we could not keep Mr. Stuart waiting any longer ; besides, I was getting colder and colder. I therefore whistled ; the deer took no notice. " A little louder," said the stalker. I whistled louder. Two of the smaller stags got up, and then the eight-pointer on the far side of the hill slowly got up, looking in our direction, and exposing his body over the edge of the hill, a fair broadside shot, at about 140 yards. I fired. " Just over his shoulder," said the stalker, and the stag still stood, as stags often will do when the bullet passes over them. I fired again and the stag instantly fell. " Good shot," said the stalker. I unloaded the rifle and handed it to the stalker, who began to put it into its cover, when suddenly the stag jumped up and galloped off. The bullet had no doubt grazed the spine, causing temporary unconsciousness. When a stag drops instantaneously, as this one did, he is often only stunned, and it is well to be on the alert and get up to him at once, ready if necessary to shoot again. This was no new experience to either of us. The old stalker had been over fifty years in the forest and had seen the same thing happen many a time; nor was it new to me. We watched the stag as he galloped away apparently none the worse for his narrow escape, and I certainly felt very foolish. The old stalker kindly began to make excuses for me. "The line was right, but you were just a little high," he said. "Your pozeesyon was not good. You had been lying long, cold and shivering, in the wet. Yon cartridges are lighter than yer regular ones, and that is why you shot over him." "No, no," I replied, "I missed because I could not shoot straight; it is a bad business; anyhow, it is better than having wounded him badly and then lost him; it is a comfort to think he is really very little the worse—now we have got to get back as quickly as ever we can." And then in the gloom and mist, running and walking and tumbling, away we went. The last mile was down a hill path filled with loose stones. At last we reached the end of the road, and saw the car coming up from a point about a mile lower down the road where Stuart had arranged to meet us. " Well," I said, " I hope at any rate that Mr. Stuart has got a stag, if not two." The stalker had been looking carefully at the road. " No," he said, " Mr. Stuart has no stag the day." I said, " How do you know that ? " " Oh," he said, pointing to the marks on the road, " his ponies have gone home trotting —look at the marks of their hoofs—and if Mr. Stuart had got a stag the pony would be walking." As soon as the car arrived we found that the stalker was right, and that Stuart, who had only arrived at our meeting-place a few minutes before, had got no stag, never having had a shot. On reaching the lodge about 8.30 P.M. we found that our host had not yet returned from the river, where he had gone to try to get a salmon, and it was not until an hour later that he returned. He too had had bad luck, having hooked a large fish which it was impossible to follow, and which had taken out in its first rush at a terrific pace some fifty yards of line, and then, a strain being put on, broke the casting line, which, it subsequently turned out, had been used in the spring fishing and had not been properly tested before being used again. Thus closed the third chapter in a day which illustrated the truth of the proverb that "misfortunes never come singly."

The following day, Tuesday, showed no signs of improvement in the weather. Thick mist on the tops, steady rain, and a wind, as usual, in the wrong direction. Stuart was obliged to drive some miles off to see a friend, but I determined once more to try the hill. This time I was sent out on the home beat. I started off with the stalker and an old gillie named Angus, who had had so much experience that he would have made an admirable stalker, and who is always very keen. I also had two ponies and a pony boy. The pony path goes straight up the mountain-side for two and a half miles. By the time we reached the point where the path stopped we were close to the edge of the mist, and the outlook seemed hopeless. We decided to cross over the opposite hill and go down on the other side, hoping that by that time the mist might have lifted. We left instructions with the pony boy to wait for two hours, and then if he heard nothing from us to go back right round to a point on the other side of the hill and wait there. On our way up the hill I found some beautiful little bastard pimpernel in flower, not very common in this part of the country. As we worked our way up the mountain-side the wind became stronger and the rain heavier. It was intensely cold, and very difficult to see what was in front of us. Having arrived at the ridge, nearly 3000 feet up, we tried to spy the corrie below. What with the tremendous wind and driving rain this was a matter of the greatest difficulty, and in conditions of this kind I always think there is a better chance of picking up deer with first-rate field-glasses than with a telescope. I managed, with my field-glasses, to discover two stags feeding in a sheltered part of the opposite side of the corrie, and, after shifting our position in order to get a better view of them, we found that there were some hinds feeding below them. We came to the conclusion that the only chance of obtaining a shot at the stags was by getting in between them and the hinds. After some trouble we succeeded in doing this, but old Angus, who knew the corrie well, said that the wind at this place was very uncertain, and that it was a question whether the stags would not get our wind. He had hardly uttered this warning before there was a fatal puff in the wrong direction, and away went the stags long before we were near them. We decided to go on and



THE FIVE SISTERS OF KINTAIL.

By Finlay Mackinnon.

try the next corrie. It is difficult to imagine a greater contrast than the comparative warmth and peace which we were now enjoying as compared with the strife of the elements outside the corrie. The rain, too, had stopped, and I said to the stalker, " No wonder the deer came here ; what a haven of rest ! "

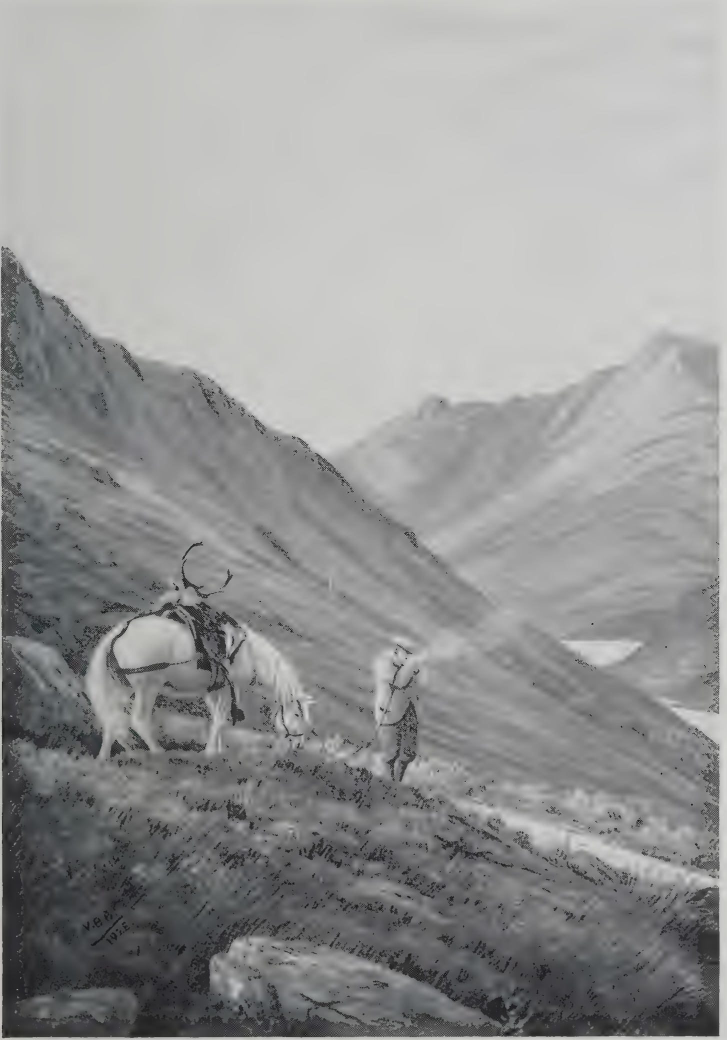
We now worked our way across the ridge, and then spied the big corrie below. We discovered two lots of stags. Those in the first lot were moving on. The others were lying down in a place where they could be stalked without much difficulty ; we therefore crawled some 400 or 500 yards, and, creeping cautiously up to the top of a little hill, saw the stags had got up and begun to feed. There was one quite clean about 90 yards below us, and another also clean about 130 yards from where we were lying. I fired at the near stag, who fell dead at once ; I then covered the other stag and pulled the second trigger — result a missfire. I hastily reloaded and fired, killing the stag. We then went down to the stags which I had shot. The first was a six-pointer, whose horns and teeth showed him to be an old warrior. The second, a nine-pointer, was a younger beast, rather heavier. Both stags were in good condition, and weighed 13 st. 9 lb. and 14 st. 3 lb. clean. After gralloching the stags, we dragged them down the hill to a point from which we could signal to the pony boy. The ponies had long been used for carrying stags, and stood quietly whilst the stags were put on them. We soon reached the pony path, and after a walk of five miles reached the lodge.

The following day, Wednesday, it rained and blew all day, and the mists hung low on the mountains, so that it was quite useless to attempt any stalking.

The next day, Thursday, was the last day of my visit and that of Stuart. Stuart was particularly anxious to kill one more stag in the company of the second stalker, because he had killed his first stag in his company sixteen years ago in this forest, and had since then killed forty-eight stags in various forests. The day looked anything but propitious; there was mist and rain, and the wind was again in the wrong quarter. My host said he would go fishing up the glen; Stuart was sent to try one of the far beats in the company of his old friend the second stalker, whilst I was left to try the home beat again. As we went up the hill the mist gradually lifted, and we saw two huge golden eagles circling round and round. We saw no deer up to two o'clock; but whilst taking lunch we suddenly saw several stags coming round the side of a distant hill. We hastily finished our lunch and set out on what proved to be a long and exciting stalk. From time to time we had to remain lying perfectly flat, not daring to move a muscle. Once we thought every chance of success was gone, for an old cock-grouse rose with his "Go-back," "Go-back," as we were nearing the rock from which we hoped to get a shot. The sun, of which we had seen nothing for so long, kept coming out and going in again. On a long stalk of this kind it is extraordinary what one sees and how ineffaceable is the memory of these sights—the eagle circling over the high tops not far distant; the blue hare leisurely making off, then stopping, sitting up and looking back; the ptarmigan, so beautiful in its mottled plumage, running in front of us, stopping now and again and peering around; the old cock-grouse rising with his warning described above, which too often brings the stalk to an untimely end; the many insects, some of them so strange and weird, that we see as we lie flat gazing into a clump of grass and moss; the granite boulders sparkling in the sunlight as if studded with many diamonds —most, if not all, of these things I saw in this particular stalk. Everything, however, comes to an end, and so at last I succeeded in getting a shot at the heaviest of the stags, who was standing on the side of a very rocky and precipitous hill. He ran a few yards and fell down dead. It was, indeed, fortunate that he fell where he did, caught between two rocks, for immediately below these rocks nothing could have stopped him from rolling down a precipice of several hundred feet, and, as old Angus said, the venison would not have been worth taking home and the horns would have been smashed to atoms. The stag, an old one in good condition, was dragged down to a place where the pony could come up, and, leaving Angus to find and help the pony boy, the stalker and I started to work our way homewards across the hill. We had been moving slowly onwards, spying from time to time, when we discovered a large number of stags feeding below us. A circuitous stalk brought us up to them, but in a very awkward position. It was impossible to get a shot, except by coming up to a point at the top of the hill below which they were feeding, and we should then be much too close to them.

There was, however, no choice, and after a cautious crawl we reached a point from which we could see the horns of stags moving away from us, at a distance of not more than 30 yards. Crawling as flat as possible to the top of the little hill, the stalker slowly raised his head, and as slowly lowered it. He then whispered to me, "There's a fine stag there, but he won't wait long, and you'd better shoot over my back." I cautiously raised the rifle over the stalker's back in the direction indicated, and, slowly raising my head, saw a fine stag, with a good head, standing broadside on, about 70 yards away, looking straight at me. As quickly as possible I covered the stag's heart and pulled the trigger; there was the unmistakable thud as the bullet struck the stag, who instantly turned and disappeared. "He'll be all right," said the stalker; "you don't often hear a bullet strike more distinctly than that one did," and on reaching the point where the stag had been standing we saw him about 80 yards below, lying dead. He turned out to be a royal, with very regular points and a good head, although he was going back and had evidently been better. Like two of the four stags I had previously shot, he was an ancient warrior.

The mist, which had temporarily lifted, now came down again thicker than ever, and the stalker said that we should have an awful job to get the stag down, as it was a heavy one, and the ground was very awkward. We gralloched the stag, and took out the heart and liver in order to make him as light as possible, and then set to work to get the stag down. This was a very heavy job, and I could not help thinking, as I had often thought before, what an excellent thing it would be if every one who is going to stalk, whether proprietor, tenant, or guest, were obliged some time or other to take part in dragging a stag to the place where he is to be put on the pony, and help in putting him on the pony. We succeeded at last in getting the stag down, and the stalker then arranged to wait on the pony path lower down, in order to meet old Angus and the pony boy, who would be bringing the first stag I had shot and the ponies. I took my rifle, the luncheon bag, and the sticks and glasses, and struck across the hill for the lodge. On my way down I began to speculate as to the age of the two old stags I had shot that day, and came to the conclusion that they were probably not less than fourteen or fifteen years old. The old Gaelic saying, which



OLD ANGUS NEARING HOME.

By V. R. Balfour-Browne.

shows how little was formerly known as to the age of a stag, came into my mind :

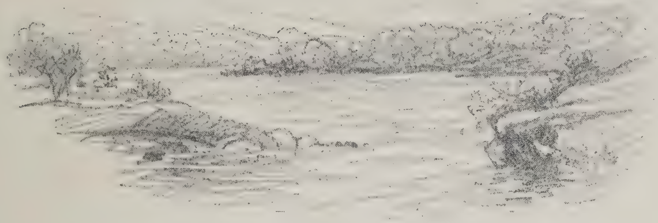
Tri aois coin, aois eich ;
Tri aois eich, aois duine ;
Tri aois duine, aois feidh ;
Tri aois feidh, aois firein ;
Tri aois firein, aois dbaraich,

which may be translated :

Thrice dog's age, age of horse ;
Thrice horse's age, age of man ;
Thrice man's age, age of deer ;
Thrice deer's age, age of eagle ;
Thrice eagle's age, age of oak.

It is probably true to say that a stag in its wild state rarely lives beyond sixteen or seventeen years of age. In those forests which are on islands, for example Jura, stalkers have unusual opportunities of observing and learning the history of particular stags, and I recollect when stalking in North Jura two years ago discussing this subject with John Mackay, the head stalker. He told me that he had several times been familiar with a stag all through its life, and in more than one instance had seen a stag with a fine head gradually lose its points, until at last it had only comparatively short upright narrow horns with two short brow points, the stag itself losing steadily both in size and weight and becoming very light in colour.

I reached the lodge about 6.30. The stags weighed very nearly the same weight—16 st. 2 lb. and 16st. 5 lb. clean—the royal being slightly heavier than the other. Our host returned about eight o'clock, having waited an hour past the time at which he had arranged to meet Stuart. The car was sent back for Stuart, who, however, did not reach the lodge until half-past ten, after a very long and strenuous day. He had, however, secured his fiftieth stag after a most troublesome stalk. He was not able to get his shot till past seven o'clock, at which time he was about seven miles from the lodge. So ended a most delightful week's sport, notwithstanding the awful weather which we had had.



IX

A SALMON LOCH IN SUTHERLAND

Fishermen's stories are said to be proverbially untrustworthy, and the great majority of people —at any rate of those who are not themselves fishermen—never seem to suppose that in the case of a fisherman, as in the case of every one else, truth may sometimes be stranger than fiction.

I have been a fly-fisher since my earliest days, and have had many good days both with the salmon and the trout, but I have never had a day full of such surprising contrasts as the day which I had with a brother of mine many years ago in the early part of September, on a loch through which flows one of the best of the smaller salmon rivers in the North of Scotland. Strange as were the events of that day, I can vouch for the absolute veracity of the following story.

The loch in question is not very large, and is not deep in any part. It contains a good many trout about three to the pound, and at certain periods of the year many salmon. We had a long drive from X., where we were staying, and reached the loch about 10 A.M. We had with us a gillie, a salmon-fisher of long experience and a typical Highlander, in height about 6 ft. 3 in., whose name, like his hair, was Sandy. We had not expected to have any salmon-fishing while we were at X., but fortunately I happened to have with me my salmon rod as well as a trout rod, and we arranged on this day that we would fish with the two rods alternately, and that as soon as one of us caught a salmon the other would take the salmon rod.

When we arrived at the loch there was a good breeze blowing from the west, with no sun. We put a medium-sized " Jock Scott " on the salmon cast, while on the trout cast we put, as a tail fly, a queer, nondescript fly, which Sandy fancied, and, as a bob fly, a " March Brown." These two latter flies were the ordinary medium-sized loch-trout flies, and we thought it wiser, as we knew that there were a lot of salmon in the loch, to put only two flies on the trout cast. My brother began fishing with the salmon rod in the stern of the boat, while I tried in the bow for trout. I very soon rose three or four trout, and managed to secure two, but my brother had no luck with the salmon. We had not been fishing for more than half an hour when the wind went down and the sun came out. The surface of the loch became absolutely calm, just like a sheet of glass, and fishing appeared to be hopeless. The salmon now began to jump in different parts of the loch, and, although Sandy said it was perfectly useless, we kept trying to cast over them. At length, however, we gave it up, and sat waiting for the breeze. Suddenly a salmon rose about twenty yards from the boat. I said, " Come on, Sandy, put me over that," and, taking up the salmon rod, proceeded to cast over the place where the salmon had risen. With great difficulty I got the line out, as it was dead calm. I cast once, twice, and for a third time, and just as I was getting to the end of my cast on the third attempt, up came the salmon, rising apparently not with the intention of taking the fly, but with the intention of drowning it. I struck at him and hooked him, as we discovered later, by the tail, and a very lively time he gave me. He played for about twenty-five minutes, during which time he never showed himself, and we all thought he was much larger than he turned out to be. He was a nice clean fish about 9¼ lb. By the time we got him in the wind had risen, and we began to fish again, my brother taking the salmon rod, whilst I fished with the trout rod from the bow. I had not been fishing for more than a few minutes before I rose something which did not show itself. I struck, and exclaimed, "I've hooked him!" Away went the line off my reel for about thirty yards, and at the end of this run the fish, a salmon which looked considerably larger than the one we had already caught, jumped right out of the water, high into the air. Then began the longest and most exciting struggle I have ever had with any fish. The rod with which I was fishing was a light 11-feet trout rod; the cast was a medium-sized trout cast, and I had on my reel about forty to fifty yards of medium-sized trout-line. There is no doubt that I should have several times lost the fish had it not been for the extraordinary skill and speed with which Sandy followed him and managed the boat. Three times nearly all my line was taken out, and once I had only a few inches left on my reel. After his first rush the fish plunged deep down, and for a time adopted boring tactics. I was able to recover most of the line he had taken out, and then he made another run and a jump, and for some time after that we followed him over the loch. On two occasions he made the most determined efforts to get into some weeds, and it was only by keeping a very severe strain upon him that I managed to keep clear of them. I never played a fish which jumped so many times or sulked less. On one occasion, after taking a large amount of my line, he suddenly turned and headed straight back again for the boat, and although Sandy did all he could to keep out of his way, the fish startled us at the end of his mad run by jumping suddenly clean out of the water within three or four yards of the boat, and falling with a tremendous splash.

Do what I could I did not seem to have any real effect on the fish, who seemed to do almost exactly as he liked with me, except on the two occasions when he tried to get into the weeds, when, expecting every minute that we might part company, I was determined, whatever happened, that he should come where I wished him to come.

We saw that the fish had taken the bob fly, and this added to my apprehensions, as I was afraid, particularly as I knew the loch was not deep, that the tail fly would catch in something at the bottom of the loch, and there would then be a catastrophe. Time wore on, and my back and arms began to ache most prodigiously. Still the fish seemed as strong as ever. My brother said he must have some lunch, and whenever Sandy and I got the chance we managed to eat some sandwiches. I began to wonder how much longer the fly would hold, and whether this fish would prove to be one more of the many good fish lost through the fly working out at the end of a long fight.

I could do nothing except hold on for all I was worth, keeping as tight a line as I could, and, of course, lowering the point of the rod whenever the fish jumped, as he frequently did. As time went on, however, the rushes made by the fish were not so long, and he seemed, at last, to have abandoned his leaping tactics, which had given me so much anxiety in the earlier stages of the struggle. The fish was gradually becoming exhausted, and the strain on the rod and line seemed to be much greater. “ He’ll be turning soon, I’m thinking,” said Sandy. The end, one way or the other, could surely not be far off now, and we discussed the question whether or not we should try to land, but, on the whole, we thought we had better not run the risk of getting into very shallow water. At last the fish turned on his side, though he quickly righted himself and made another short run. Sandy had got the boat in about three feet of water, a few yards from the bank ; he handed the oars to my brother, seized the gaff, and got out of the boat. I slowly reeled in my line ; there was another short rush from the fish, and again I reeled him up. Nearer and nearer he came to the boat, and again turned on his side. Suddenly, in less time than it takes to tell, Sandy had the gaff into him, and was struggling to the shore. Safely landed, the fish was speedily given his *coup de grâce*. He was a very red male fish, weighing rather over 10¼ lb., and I had hooked him in the hard part of his upper jaw, which accounted partly for the fact that I had so little power over him, and also for the fact that the hook had kept its hold so well. " Now then, Sandy," I said, as I got out my flask, " if any man ever deserved a drop of good whisky, you do." " Shlàinte " (Gaelic for " Your good health "), said Sandy. " It was a grand fight, sir; I've never seen a better." " How long do you think you were playing him ? " said my brother. " Somewhere about an hour, I should think," I replied. " Four hours and six minutes," he said. " I looked at my watch when you hooked him, and it was then just a minute or two before half-past one; and I looked at my watch when Sandy gaffed him—it was then twenty-five minutes to six. I counted the number of times the fish jumped, and it was seventeen. I don't suppose you noticed it," he added, " but there was a cart going off with peats, near the loch, soon after you began to play the fish, and it came back again not long ago." We heard afterwards that the men in the cart thought I was playing another fish when they passed us on their return journey.

The light was going as we pushed the boat out again. I handed the salmon rod to my brother, and he began to fish from the stern of the boat, while I fished again from the bow with the trout rod. Sandy allowed the boat to drift slowly along the edge of some weeds. I do not think that I had more than three or four casts when, just as I was nearing the end of my cast, a salmon, which looked as bright as silver, and about the same size as the one we had just killed, rose at my tail fly, with a head and tail rise as if it meant business ; and, as it turned to go down, I felt the hook go home. The fish did not run, but worked about near the surface of the water, close to the weeds, as if it did not realise that it was hooked at all. "Back the boat quickly, sir," said Sandy, handing the oars to my brother, and seizing the gaff. My brother took the oars and backed the boat quickly in the direction of the fish. I reeled up my line ; there was a momentary vision of about three-quarters of Sandy leaning out of the boat, a tremendously quick lightning-like movement of the gaff, and the salmon, gaffed with extraordinary skill behind the shoulder, was in the boat.

I do not think that more than four minutes could possibly have elapsed from the time that I hooked the fish to the time it was in the boat. It was a beautiful, clean-run female fish, with a small head, and in perfect condition. It was very lightly hooked, and if it had run or jumped at all it would almost certainly have got off. It weighed within a few ounces of the weight of the fish which had given me such a tremendous battle, and yet, owing to the extraordinary skill of Sandy with the gaff, and the speed with which my brother had acted, this fish occupied us only as many minutes as the other one had hours!

We continued to fish for a short time, but it became dark so rapidly that very soon we had to stop, and without a further rise of any kind.

X

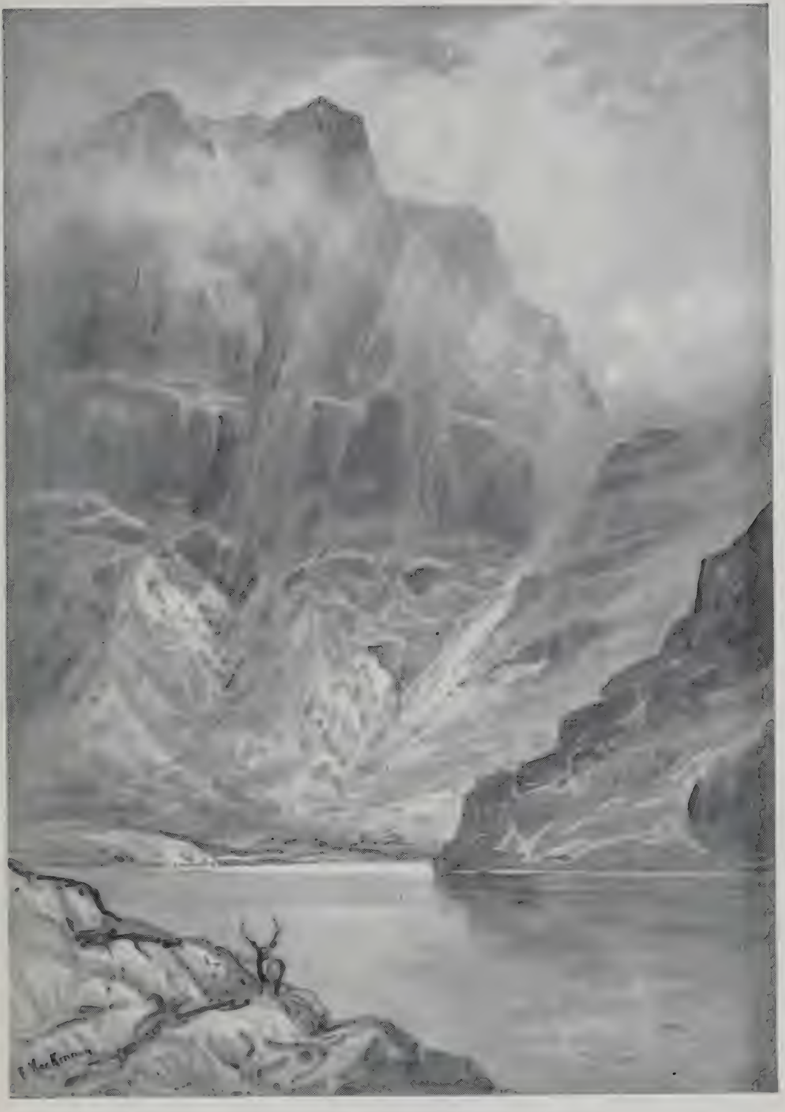
THE HOMING INSTINCTS OF WOUNDED DEER

In these days one hears so much of the homing instincts of animals and birds that the two following authentic instances of deer, whose habits are not so generally known as those of some other animals, may be of interest.

Stalkers, and those who know the habits of the red-deer, know well that a stag when wounded will seek what he knows from experience to be a haven of safety. Thus, if he has come in the rutting season from his native forest and is wounded on other ground, he will assuredly make for the sanctuary in that forest. So, too, if he has been born and reared in a particular part of the forest and has come to regard that place as his home, he will struggle to reach it if wounded. One interesting illustration of this has come within my own experience, and another was related to me by the stalker who was with me on the occasion referred to.

I was stalking in a forest upon part of which unusual conditions prevailed. That part which was nearest to the lodge was enclosed by a deer fence, but, owing to careful management, and the introduction from time to time of fresh stock, there are some very good heads in this part of the forest. I always prefer, however, when I have the chance, to stalk on the open ground outside the fence, although it means harder work, as it is the far beat and part of it is on very high and precipitous ground. It has, however, this great fascination—that one never knows what sort of stag one may find there. The forest itself is an exceptionally good one, and marches with several of the finest forests in the Highlands.

On the day in question I was on the far beat and secured a good stag after an exciting stalk.

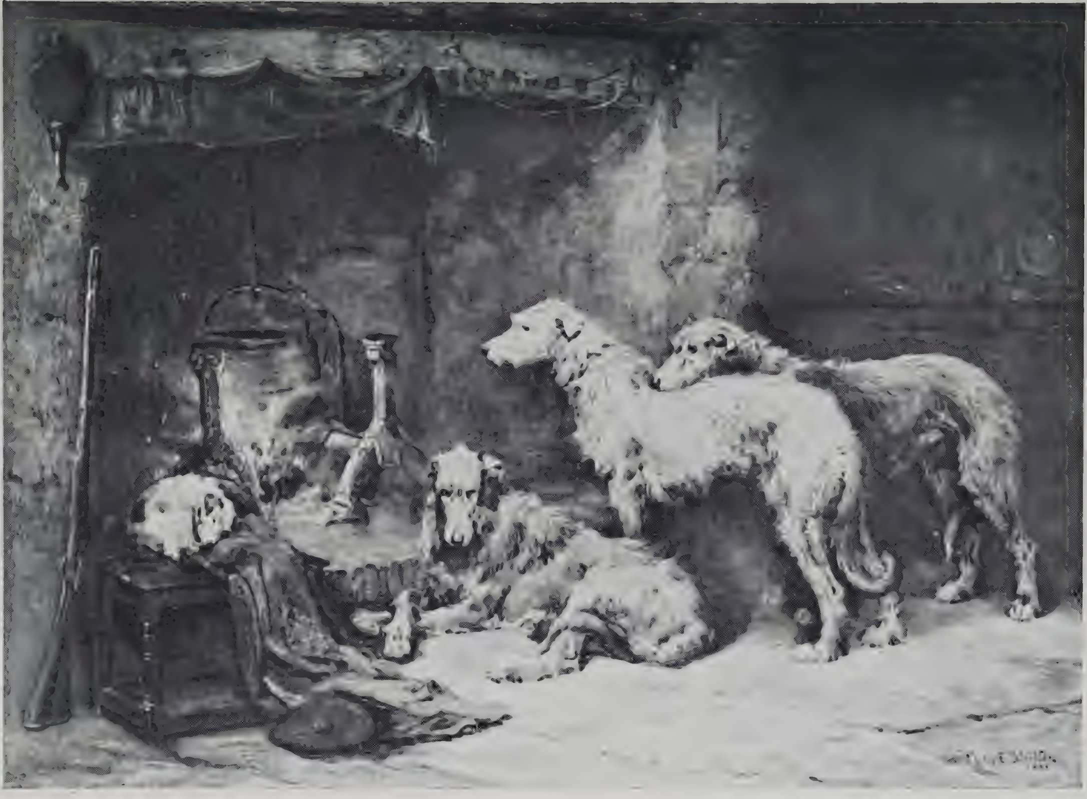

F MacKinnon

THE SANCTUARY, KINLOCHEWE FOREST.

By Finlay Mackinnon.

After seeing the stag safely put on the pony in charge of the gillie, the stalker and I set off towards the farther end of the beat in the hope of getting a second stag. Not far from the march, on precipitous ground covered with rough boulders of rock, we spied a good stag with a large number of hinds. The deer were in an awkward position, and we found that it was impossible to get nearer to them than about 200 yards. The day was getting late, therefore this was probably our only chance. The stag was moving about and might very soon be over the march, so that there was no time to be lost. Getting quickly into the best position I could, I fired, and evidently hit the stag very hard. Directly I fired the deer disappeared as if by magic. The stalker said he was quite certain the stag could not go far. On reaching the spot on which the stag had been standing when I fired we found marks of blood, and had no difficulty in following these for some 50 yards, by which time we were close to the march, and in full view of a large corrie and other ground, all of which was in the neighbouring forest. We saw what were evidently some of the hinds making off across the march, but the stag and the rest of the hinds were nowhere to be seen. We moved a little farther on where we could get a view of other ground, when suddenly there was a tremendous clatter of loose stones, and we saw the stag and some twenty hinds about 120 yards from us. The deer stopped for a few seconds, the stag looking straight at us, and then away they went. We ran quickly to the point where they had disappeared, and saw the hinds we had last seen with the stag going in the direction which the other hinds had previously taken, but the stag was not with them. "He cannot go far," said the stalker. The ground was very much broken up by large stones and boulders, and we both thought that the stag must be lying hidden not far from us. We were quite certain from the position we were in that we could not have failed to see him unless he had turned back below the hill and gone into the forest from which we had come. We noticed the hinds stopping every now and then and looking back, as they so often do when one of their number has been wounded and is behind them. By following the marks of blood on the stones we traced the course the stag had taken for about 200 yards, but after that we lost the tracks. We made the most careful search, and the stalker went some distance into the adjoining forest, but all in vain. The light was beginning to go, and at last we decided to give up the search, for that day at any rate. The stalker, who had had his glass on the stag when I had fired at him, said he was quite sure from what he saw then and from the way that the stag was bleeding that he had been mortally wounded and could not live long. I felt very much depressed, for if there is one thing that distresses me more than another it is to leave a wounded stag on the ground; and though I thought that the stalker with his experience was right in thinking that the stag could not live long, particularly as I knew my rifle and felt sure that I must have hit the stag somewhere not far from the heart, the fact remained that one could not be quite sure what had really happened. This was the last day of the season, and I was leaving on the following morning. The stalker promised me that he would search the ground on the following day, and that he would also tell the stalkers in the neighbouring forest, and that if he heard anything of the stag he would let me know. "I shall certainly know the head if it is ever found," he said, "for when the stag looked straight at me I could see the space between his forks at the top. It was a ten-pointer, I think; the points were very regular, but as far as the head goes it is not much to grieve over, for it was on the narrow side." "Still, it is a bad business," I replied. "If we only had had a tracker we should certainly have got him without any trouble." A really reliable tracker is indeed invaluable on an occasion of this kind, but it is only in a few forests that dogs are now used in following wounded stags. The noble deer-hounds which were the trusty allies of our fathers on the hill have during the last forty or fifty years been replaced in those forests where dogs are still used by the golden retriever, or more often by the collie, the two dogs last mentioned having been found more suitable for pursuing wounded deer. The deerhound was so high-couraged that he would not bay the stag, but would pull him down or be killed by him. A further objection was that he would hunt by sight rather than by scent, it not being in his nature to put his nose to the ground, and it was therefore practically impossible to train him as a tracker.

I heard no more of the wounded stag until the following season, when I once more found



"THE TRUSTY ALLIES OF OUR FATHERS ON THE HILL."

From the Picture "After a Hard Day" by PHILIP STRETTON.

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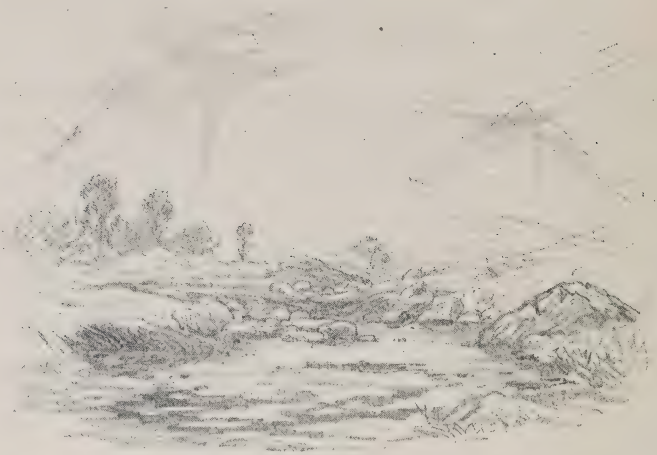
myself in the same forest. I asked the stalker whether he had any news of the stag. He said: "That is a question. The stalkers in the other forest never found any stag, but a very curious thing has happened. About 20 yards inside the fence, at the nearest point in that part of the forest which is fenced in from where you shot the stag, that would be about a distance of three miles, the skeleton of a stag was found last April. The head stalker on that part of the forest tells me he is quite sure it was not a stag that was shot inside the fence. I have got the head here, and will show it to you." I examined it carefully. It was a good regular head of ten points, with remarkably long forks at the top, and I thought it looked a better head than that of the stag I had shot, and said so to the stalker. He replied: "It is the same shape, and I well remember noticing the space between the forks at the top. Not only that, but in April when we found him there were no stags on that part of the ground and had not been for some time; also by the bleached condition of the horns, I am quite sure he must have died in October or early in November, and he could not have died a natural death after the winter was over. And as to his getting through the fence, at that season of the year stags have a wonderful way of getting through a fence if they want to do so. If he was mortally wounded after he got outside he would be sure to go back to the place where he was born and knew he was safe, and depend upon it he would find his way back through the fence where he got out. One can never be sure, but on the whole I think he is the stag you shot. You see the only way he could have gone that day without our seeing him was out of sight round that hill in the direction of the fenced-in part of the forest. I am sure he was mortally wounded, he had seen us; and after seeing us, being wounded, he would go straight on, as you know, so long as his strength would carry him and he would go straight to his old home. They're wonderful in that way, deer are: I shall never forget how I was taught that years ago when I was out with the young chief at X."

I asked the stalker to tell me the story, which I give in his own words: "About twelve years ago, when I was a gillie at X, I was out one day with the chief's son late on in the season, about the end of the first week in October. About 2 o'clock in the afternoon we saw a Royal stag and some hinds above the black shed, between the lodge and the second stalker's house, and after a successful stalk, he fired but wounded the stag, just grazing him in the lower part of the body. The stag did not give the rifle another chance, but turned his head fair south, towards the top of the C——. We watched him crossing the top, then we made for where we saw him crossing, and we saw him about 300 yards away as he was going down the opposite side, and he was still going south, then getting out of view, into a hollow. The stalker did not lose his chance, but made a sprint to get up to him, which he managed to do, but the wily fellow was always keeping his back to his enemy, and making fast for some private corner, where he hoped he would be safe. The trigger was not pulled for him. Being in plain ground there, and the Royal stag fast on the move, we could do nothing but wait and watch where he would cross the next ridge, which was fully a mile away. Once the stalker saw him cross, we made at once for the spot he went out of our view, getting there as soon as our legs could carry us, and after spying that part of the ground very carefully, we failed to pick him up. That was in the centre of the Glashan, a piece of ground about 1½ miles square, very level, with shallow peat hags, and guarded on three sides with slightly rising ridges. The distance between where the stag was wounded and where we lost him was about seven miles. By this time the light was failing, so we had to make tracks for home. One evening, a few days later, when it was beginning to get dark, the head stalker was out about the larder, and noticing a stag with some hinds above the lodge, and putting his glass on him, at once knew the stag he had the run after a few days before. I was just after getting home from the hill, and he ordered me to go and shoot him. The rifle I never fired before, and the sight although marked for 100 yards I afterwards found to be a 70 yards sight. I got to about 100 yards from the stag, but having the evening light, and being among juniper bushes, I had to shoot off my hand, and missed him. There was no other chance that evening, as the light was getting bad. Two or three days after, about 10 o'clock in the morning, I was going along to the E—— Bothy, about a mile from the lodge, when I saw about twenty hinds and a stag amongst them, and after putting the glass on him, I knew it was the same stag. I at once went back to tell the head stalker, but finding him not at home, I took the rifle. I got to about 120 yards of the stag, but shooting too low, I grazed his foreleg below the heart; he did not give me another chance then, but left the hinds and turned to the south across the top. When I got to the top I noticed him about half a mile from me; keeping him in view he went for about two miles south, then turning south-west I kept him in view for three miles, then lost sight of him, but I could understand by the movements of some hinds the line he was taking. I made for the place where I lost sight of him, but having got there I could see nothing. I followed up the burn that rises at Cairn-an-S——, and after getting half-way up the burn, I came out to the open to spy. I was spying for some time, and was putting my glass in its case when I noticed a black object about half a mile away, about the size of a blackcock. I used my glass, and who was this but the Royal lying in the centre of the Glashan, on quite level ground. He was lying down licking the scratch where I wounded him earlier in the day. With great difficulty and after a long crawl I got to about 70 yards of him, and shot him through the neck. That was a lucky range, as the rifle was sighted for 70 yards. I was in an awful mess through crawling in burns and gutters after him, but I was very keen on getting him, and as an old chap once said to me, 'When you have a difficult thing to do you must not be minding your clothes.' Well, I was pleased I got him as I was sure he could not live very long. I considered what to do; my first idea was to put him in some safe place, and come for him next day, so I took him to a burnside into a hollow and hid him, but before doing so I put a small chack with my knife above his brow antler, to know him if ever I saw him again, as I did not know who might be looking at me. I was in doubt whether I would take his head off or leave it there all night. I at once changed my mind, as it was so good a head I did not like leaving him out there all night. I cut his head off, giving him a long neck for being stuffed. That finished, I shouldered the Royal head, took him back five miles to the E—— Bothy, left him there that night, and took it two miles further to the lodge the next day, and to-day it hangs in the chief's mansion. The young chief was very glad to get it. The head was a very good Royal, thick horns, points equal and well-shaped. The distance

"I WAS SPYING FOR SOME TIME."

From a Photograph by the Author.

between the place where I shot him through the neck and the place we lost him the day the young chief wounded him is hardly half a mile apart. That day the stag was first wounded, he went whatever a distance of six or seven miles to that quiet spot in the centre of the Glashan. The day I shot him through the neck I followed him for about eight miles from the place where I grazed his foreleg below the heart. He never saw me, he never stopped, always making for that private spot, the place in the centre of the Glashan. So this stag went two times to that same place, as he hoped he would be safe there, and possibly that stag might have been lying in the same bed both nights." This shows the distance a stag will go for safety, and that he goes back to his old home, the spot where he thinks he is safe. And so I believe that my friend the stalker must have been right in thinking that the stag he had found in April was the stag I had shot in the early days of the preceding October.



XI

THE METHOD BY WHICH EAGLES AND HAWKS SECURE THEIR PREY

As is well known, the eagle lives largely on carrion such as dead deer and carcases of sheep, differing in this respect from the peregrine falcon, which lives exclusively on what it kills. Generally speaking, the eagle secures its prey by pouncing on it on the ground and carrying it away in its talons. He swoops down at a great pace in a slanting direction, and in this way not only captures hares and rabbits, but also grouse and ptarmigan on the ground and young ducks on the loch. It is very interesting to watch the great bird searching slowly along the side of a hill, about 50, 100, or 150 yards above the ground; then he suddenly pounces, and in a moment is up again and away with his prey in his talons. So regularly does the eagle adopt this method of capturing his prey on the ground, that I have met stalkers who have told me that they do not believe that an eagle can overtake any swift-winged bird such as grouse or black game. This is certainly wrong, for the eagle does sometimes, though comparatively rarely, adopt the other method of securing his prey—the method which I have already described (see p. 64, *supra*)—that of pursuing and catching his prey in the air, and in this way without doubt captures blackcock, grouse, and ptarmigan. I have already stated (see pp. 57-70, *supra*) that in my opinion the eagle in his downward flight is faster than the peregrine. Even in his horizontal flight, once he gets going he can fly very fast if he chooses, but of course is not nearly so agile and cannot turn and twist with the rapidity of the peregrine, and the result is that when he overtakes his quarry he frequently misses him.

Nearly a hundred years ago one of the most acute observers amongst ornithologists wrote as follows: "In another part of the Western Highlands of Scotland we had an opportunity of witnessing the powers of flight of this bird in pursuit of its quarry. An old blackcock was sprung and was instantly pursued by the eagle (who must have been on a neighbouring rock unperceived) across the glen, the breadth of which was at least 2 miles.

"The eagle made several unsuccessful pounces, but as there was no cover and the bird large, it probably fell a victim in the end."[1]

Lastly, as I have already said in the pages just mentioned where I have fully discussed the matter, the eagle on rare occasions swoops down at a terrific pace on his prey in the air, striking it to the ground but not clutching it or, to use the falconer's phrase, binding on it.

The eagle has a great partiality for hares, cats, young fox cubs, and young lambs. I remember James Macintosh, head stalker at Loch Rosque, telling me that on two occasions whilst waiting at a fox den he had shot an eagle. He added that, whilst the old foxes are away, the cubs, when they get hungry, sometimes make such a noise that they can be heard at a considerable distance, and that he believed this attracts the eagles, particularly if their eyrie in which they are rearing their young happens to be in the vicinity. He went on to say that he thought this accounted for his sometimes finding fox dens containing only one or two cubs instead of the usual number of three to seven. There is no doubt that eagles sometimes attack deer calves, fixing their talons in their victim's neck or back and striking the calf with their wings. They frequently hunt in pairs, and have been seen to drive the calf over a precipice.

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[1] *Ornithological Dictionary of Birds*, by Col. G. Montagu: 2nd edition by James Rennie, London, 1831.

On rare occasions eagles have been known to attack a full-grown stag. In certain parts of the Highlands they have lately increased in numbers, and perhaps as a consequence, their ordinary food not being so plentiful, have become bolder.

Only last year I was stalking in a forest where a few days earlier a stalker had witnessed a most unusual incident. The following is his account of what he saw:

" A gentleman and I were out stalking on the 25th of September, and while the gentleman was having lunch, I went off about 200 yards to have a spy. I got a stag lying at the foot of a rock.

While I had the glass on him, an eagle suddenly swooped down and attacked him. The stag went headlong into a bog, but managed to get up. I then ran back for the gentleman thinking we would have a shot, but by the time we got back the stag and eagle were over the sky-line and the eagle still following while going over the sky-line, but after that we don't know what happened, as both eagle and stag went out of sight."

Donald Matheson, who has had a lifelong experience in the forest and has only recently retired after having been for many years stalker at Glen Shieldaig to Mr. C. J. Murray of Loch Carron, told me that on one occasion, but on one occasion only, he saw an eagle attack an adult stag.

" It would be, as far as I remember," he said, " between the 6th and 10th of October in the year 1888 when I was spying one morning at the forest stables. I picked up a stag on the top of Glen Shieldaig, quietly feeding on the Glaschnoc side, and while having my glass still on the stag an eagle swooped down on his head. The stag fell on his hind-quarters, but was soon on his feet again and ran for his life while the eagle was fixed on him. The stag made for a thick clump of birch-trees, and immediately the stag got under cover the eagle could not keep its hold, owing to the thick branches of the trees, and left the stag. The eagle kept hovering for some time above the wood where the stag was concealed, but at last flew away."

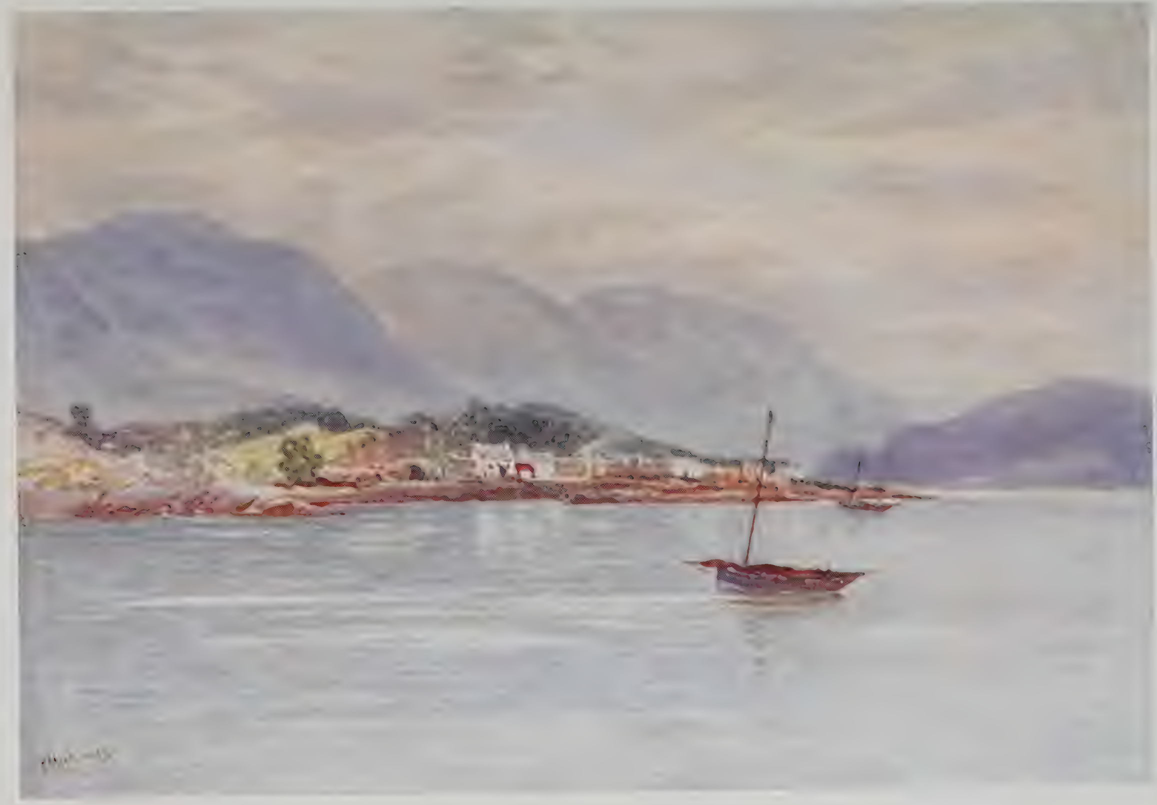
Whilst stalking in the neighbouring forest of Applecross two years ago, Colonel the Hon. Claude Willoughby had a most interesting experience, a description of which he has kindly given me permission to reproduce here:

"On 30th September, 1921," he writes, "I was stalking with Alick Mackenzie on Applecross. We had come through Corrie Chaorachan into Corrie Na Na and spied a stag with hinds on the west face above the loch. The wind was west, and after a difficult and exceedingly good stalk across the Corrie and above these deer, avoiding hinds, also another stag with hinds, we arrived at a point within 150 yards of the stag we were after and found him lying down. Owing to the light and the distance, I determined to wait for him to rise before shooting. After waiting half an hour, hinds which we had seen beyond the place where he was lying came galloping past him. He rose and I shot him; he fell dead. We at once saw that the reason of these hinds galloping was that an eagle was after a calf which had separated from the herd. We saw the eagle land on the calf's back twice, but the calf escaped.

"The eagle then attacked a hind in the herd. A kestrel hawk now joined in, and mobbed the eagle. This attack lasted only a short time. The eagle then circled round my dead stag, the kestrel soon after disappearing. The eagle settled on a rock about five yards from the dead stag, and remained there until we showed ourselves. All this took place within 200 yards of us.

"On the Tuesday following Lord Derwent was also stalking on Applecross, near Corrie Attadale. He and the head stalker Finlayson saw an eagle attack a calf, which it knocked down twice, but the calf escaped."

There has been much difference of opinion, and from time to time considerable controversy as to how the peregrine kills its prey. Some stalkers and ornithologists believe that it is done with the edge of the wing, a smaller number with the beak, whilst others think it is done with the talons. The last-mentioned view is that which



THE APPLECROSS HILLS, AND A HIGHLAND FISHING VILLAGE.

By Finlay Mackinnon.

is, I believe, universally held by falconers, who after all have many more opportunities of seeing how it is done than any other class of men. I have frequently discussed this question with naturalists and stalkers, keepers and others interested in this subject, and have listened to all they could tell me. I have also had the great advantage of hearing at first hand from falconers of experience their views and their reasons for them. Further, I have myself been so fortunate as to see the wild peregrine pursue and stoop at its quarry. I have seen it strike and kill it and on occasion miss it. In addition to this, I have read everything I could find on this subject, both in the older and more modern books of authority. I am satisfied myself that the view held by the falconers is the true one, and I cannot state their conclusions better than, or indeed so well as, by quoting from three letters that I have received. The writers of these three letters have kindly given me permission to quote their views.

Major C. E. Radclyffe, who has had almost unrivalled experience as a falconer, writes as follows:

"All forms of falcons and short-winged hawks, such as sparrow-hawks and goshawks, always strike their quarry with *their feet*, and never with anything else. The killers are those which ‘ bind to ’ their quarry in the air, that is, pick up a bird in their feet, and never let go of it until they come to the ground. A really experienced old trained falcon does this nine times out of ten.

“ Sometimes, however, when stooping from a great height, the impetus of the falcon is so terrific that she seems to know if she ‘ binds to ’ her quarry, the impact will be so great as nearly to tear her legs from her body. Thus, when stooping at a heavy bird like a grouse, or a pheasant, at great speed, the falcon slightly throws upwards on her impact with the quarry, and delivers a raking blow with her single long back talon. By this means (her back talon being sharp as a razor) I have seen a grouse ripped open from its tail to its neck. I have seen its wing broken and I have seen its head cut off.

. . . . .

“ All falcons are very careful not to risk touching anything with their wings, hence a falcon will never really stoop at a bird on the ground with an idea of catching it, but they will keep stooping just over a bird they can see on the ground in the hope of flushing it, and then they will catch it in a minute.

" I have seen falcons and hawks break their wings by striking the smallest twig on the branch of a tree when misjudging a stoop at a bird.

" Therefore, you can imagine how easily a hawk would smash its wing if it attempted this, to hit a heavy bird like a grouse or pheasant going at terrific speed.

. . . . .

" If you threw a lawn-tennis ball against a falcon's wing coming at you at the rate of over a hundred miles per hour, and hit its wing-bone, that hawk would never fly again.

" I have many times in my life, when casting lightly with a very small trout rod, just touched the wing of a swift or swallow with the tip of the rod. I never broke a rod thus, but nearly always broke the bird's wing. I think, when you come to consider these things, you will see that a hawk dare not strike the smallest bird with its wing.

" It uses its beak only to finish off a bird on the ground, and this she does by breaking the bird's neck with its beak.

" I have lived amongst wild and trained hawks all my life, and I can assure you the above facts are true."

The reference in the above letter to the peregrine killing a grouse by striking it with its talon reminds me of the following interesting note in *Birds of Great Britain* (5 volumes), published by the author, John Gould, F.R.S., in 1873.

" Evidence forwarded to Mr. James Burdett, keeper to the Earl of Craven. . . . On dissecting a coot I saw taken and dropped by a peregrine falcon, I found the neck dislocated at the third joint from the head and an appearance as if the sharp point of the hind claw had penetrated the brain at the occiput."

Captain C. F. A. Portal, D.S.O., writes as follows :

" I have seen many dozens of game-birds struck down by trained peregrines within 50 yards of me, and I can definitely state that the hawk *invariably* aims a blow *with the talons* at his quarry. . . .

" So true is a peregrine's aim that he generally gets home with both his *hind* talons somewhere near the middle of the quarry's back, but often he hits a wing and breaks it, and occasionally he breaks the neck in the same way. I have examined hundreds of birds (partridges) killed by hawks, and I have always found the mark of two hind talons or one of them. The decapitation is generally performed within a few seconds of the hawk's alighting on the dazed or crippled victim. It is performed by one powerful wrench of the beak. No peregrine will eat or even pluck a living bird. . . . In my experience it is a rare thing for a peregrine to strike a bird dead in the air. It does occasionally happen that the blow falls on the head or neck, but what generally happens is that the bird is thrown violently to the ground with a wing broken or the back dislocated. The concussion with the ground dazes it, and the hawk quickly drops down upon it and kills it with its beak.

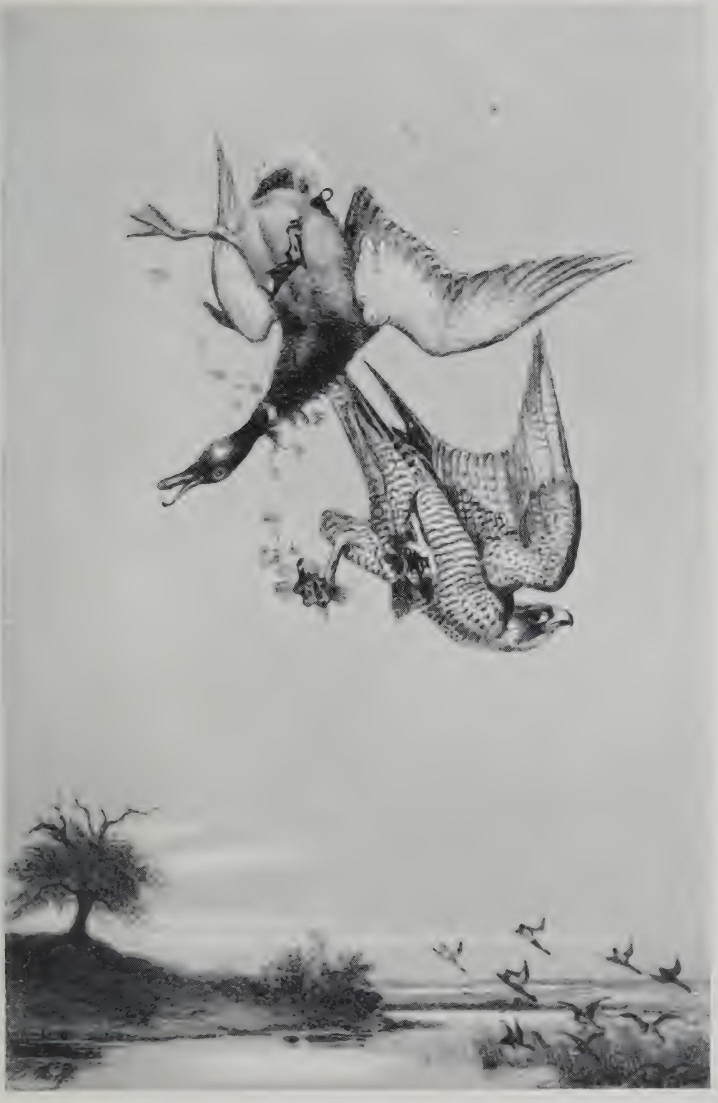
"The merlin often kills comparatively large birds (*e.g.* the thrush, fieldfare, golden plover, etc.) by strangling them, as its beak is not strong enough to break their necks. It kills larks, etc., in the same way as the peregrine kills his quarry, that is, by sudden dislocation of the neck.

"The sparrow-hawk kills its prey by gripping it with its feet and driving the claws into its body; this is a slow death sometimes, and the sparrow-hawk has none of the true falcon's scruples about plucking (and even, I fear, beginning to devour) a living bird.

"I do not like the sparrow-hawk for this reason, though, of course, the falconer can generally prevent cruelty by killing the quarry himself."

Captain G. S. Blaine, another falconer of great experience, also has no doubt on the matter. In a letter to me on this question he writes:

"A peregrine strikes with its talons only. Of this I am certain, having seen the blow given to countless quarries at close quarters. How the other idea (that of striking with the wing) could possibly have originated I do not know. It is quite obviously impracticable. . . . If a peregrine administered the terrific blow which she delivers when striking a quarry with her wing, breast, or beak, she would be knocked out at once, and permanently injured. A peregrine can easily, after recovering from her stoop, turn over again and catch the quarry in the air. I have seen this often done, when the bird had been struck high up in the air. If near the ground, it would fall before the hawk could get hold of it. Many also often catch and hold a quarry without knocking it down. This is the way most successful



DEATH OF THE MALLARD.

By J. Wolf.

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game hawks catch grouse or partridges. When struck, the blow is delivered on any part of the body—it may be the head and it may be the back or the wing which may be broken."

In *Reminiscences of a Falconer* (John Nimmo, London, 1901) Major C. H. Fisher writes:

"The blow is given by the falcon's strong and sharp hind talon of each foot—usually sharp as a needle and driven at great speed by a bird weighing over 2 lb."

As illustrating the falcon's stoop Major Fisher describes how he saw a wild falcon strike a greyhen twice. He says (p. 97):

"As illustrating the force of a falcon's stoop, I may mention an incident which occurred to me on the banks of the river Orrin when fishing. From some bracken I put up three greyhens. Down came a wild falcon from the sky at the middle bird. I saw and heard the blow. The greyhen staggered on, leaving the usual tribute of feathers behind her. Up rose the falcon in the grand and stately style so few trained hawks can ever adopt or regain (so much do they lose by captivity); over and down she came, and down fell the quarry, as dead as though shot by a bullet. . . . Down too went my long rod and off went I.

. . . On this occasion I took possession . . . of the wild hawk's prey. On examining the effect of her two blows, I found that three ribs on one side were clean cut through and separated from the backbone as by a chop with a heavy knife and strong hand, and one talon had entered and split the base of the skull, from which the brains were protruding."

One of the foremost advocates of the contention that the fatal blow is inflicted by a stroke of the wing is Mr. Tom Speedy, who deals with this subject in his *Natural History of Sport in Scotland with Rod and Gun* (pp. 102, 103). He bases his argument first on the supposition that when the fatal blow is struck on the back of the quarry, the skin is only bruised and not torn. He writes :

" A keeper friend of mine near Kingussie witnessed a grouse struck down by a peregrine, and as there was not a mark on it he sent it to me. Carefully plucking it, I noted that with the exception of a bruise along the spine there was no other mark on it ; yet the blow had been sufficient to cause instant death. This comports with my own observations, and it is difficult to understand how this blow could be struck by these terrible talons without the skin being torn. As the heads of grouse are frequently cut off when struck by a peregrine, it is the opinion of foresters who have watched them with their glasses that it is done by the wing. Falconers deny this and maintain that it is done by the hind talon. How, then, it may be asked, can this be done when there is not a scratch on the victim, but only a bruise indicating where the blow was struck ? "

The answer to this argument is that there is absolutely reliable evidence to the contrary—in other words, that sometimes the skin is torn.

Major Radclyffe in his letter referred to above writes : " I have seen a grouse ripped open from its tail to its neck."

Captain Portal says : " I have examined hundreds of game-birds killed by hawks, and have always found the marks of the two hind talons or one of them."

Sometimes, no doubt, as in the instance referred to by Mr. Speedy, there is a bruise along the spine and the skin is not torn, but this is no doubt to be explained, as is pointed out by a writer cited below, by the way in which a falcon shuts its feet when stooping, the hind talon on each foot closing over the fore talons, thus forming a kind of keel—and the bone on the back of the grouse is strong enough to prevent more than a severe bruise.

Mr. Speedy continues :

" It is argued that it is impossible the bird could be killed by a blow from a hawk's wing, as the wing would certainly be injured. I have seen a retriever stunned by a blow from the wing of a swan, and but for my being in close proximity in a boat it would certainly have been drowned. Those who have put their hand into the nest of a wood-pigeon are familiar with the blow even a half-fledged bird can give with its wing. I have been struck with the fight a wounded wild goose can put up, and the blows it can inflict on a retriever with its powerful wings."

But, with all respect, surely the blow of a large powerful bird like a swan or a goose delivered in this way is a very different thing to the blow which is delivered by a peregrine when stooping at its quarry at the terrific speed with which it then flies, and, in my opinion, the view taken by experienced falconers, such as those quoted above, that the wing would most certainly be broken or badly injured, is the correct one.

Finally, Mr. Speedy says:

" When a falcon strikes a bird in the air there is a loud ' clap ' which I have heard several hundred yards away. This would not be the case if struck by the talons."

I venture to think, however, that the argument based on the sound caused by the impact carries Mr. Speedy's contention no further. Would not this loud " clap " naturally be expected if the peregrine struck its quarry in the manner described?

In conclusion, then, what is the correct view of the matter? In the words of a recent writer:[1] " The truth . . . seems to be that the falcon shuts its feet when stooping, the hind talon on each foot closing over the fore talons, thus forming a kind of keel. When the falcon strikes a grouse, the latter may be partially or wholly decapitated, or it may be severely bruised on the back. The neck of a grouse is soft, and the ' keel ' of a peregrine's hind talon is sufficiently sharp to cut it, whereas on the back of a grouse the bone is strong enough to prevent more than a severe bruise. The shock of impact must, however, be tremendous, for a bird so struck hurtles to the ground at once. When the peregrine strikes, one hears a loud ‘ clap ’ audible at a considerable distance, and it is this noise that has given rise to the theory that the falcon strikes with its wing. If the peregrine used the latter, however, in all probability the wing would be seriously damaged or broken, because the pace at which a falcon stoops must be seen to be believed.”

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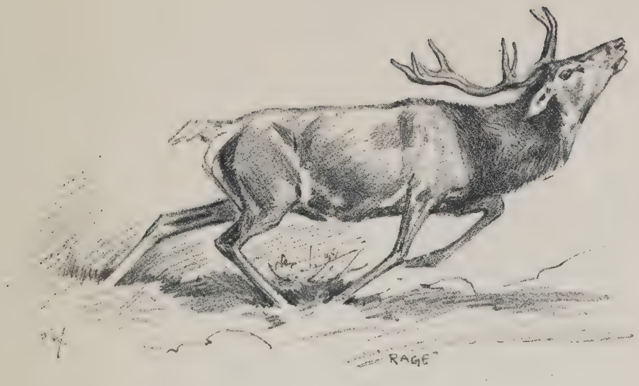
[1] *Rough Shooting*, by Richard Clapham, ch. vii. pp. 125-126. Heath Cranton, Ltd., London, 1922.

There is another interesting fact in regard to this fine bird which is not generally known. There seems little doubt that he deserves the description which has more than once been applied to him—that of a wanton murderer. Thus Charles St. John in his classic work, *Wild Sports and Natural History of the Highlands*, says (chap. x.): “ The peregrine seems often to strike down birds for his amusement, and I have seen one knock down and kill two rooks, who were unlucky enough to cross his flight, without taking the trouble to look at them after they fell.”



XII

INSTANCES OF WOUNDED STAGS ATTACKING STALKERS

It must often have occurred to every one who has had experience in stalking what a very different sport stalking would be if stags realised their power and had no fear of man. It is, of course, well known to every one who is interested in the habits of deer that a tame stag in the rutting season is one of the most dangerous animals, and some years ago a tragedy occurred in Ross-shire, when a stalker was attacked and killed by a stag which he had himself brought down from the forest as a calf and which knew him well. I have often asked experienced stalkers whether they have ever known an unwounded stag attack a man, but with one exception I have never heard of any such case.

The one instance to the contrary is that given by Mr. Frank Wallace in his delightful book, *Stalks Abroad.* In describing his stalking in New Zealand, Mr. Wallace gives what he describes as the only really well-authenticated instance which he can vouch for of a wild stag attacking a man, and adds that most likely the darkness and time of year had something to do with the stag's boldness. He thus describes the incident: "It was dark by the time B. and his guide reached the river-bed, which at the point they struck it is very wide. They had scrambled along over the boulders and rocks with which their course was strewn for some distance, when they saw a dark object lying on the stones in front of them. This presently resolved itself into a sleeping stag, who, hearing them approach, jumped up and disappeared. They had not seen the last of him, however, for a little later they encountered him again, apparently very annoyed at having been aroused from his beauty sleep and determined to wreak vengeance on some one. Seeing them, he seemed to think they would be suitable objects on which to make a start, and advanced with lowered head. B. threw a stone and hit it in the flank; but this had no effect, and the animal advanced a few paces nearer and stood swaying its head from side to side a few inches off the ground. As some one had to go and the stag seemed disposed to give no quarter, B. fired a shot, but without effect. The stag still advanced, until a second shot took him in the chest and finished him off. I saw him the next day where he had fallen. He had a small head of six points, and was obviously a young beast."

There are no doubt rare instances of a wounded stag attempting to attack a man.[1] I myself have never known such an instance, and, although I have often asked old stalkers whether they have ever known of anything of the kind, I have only once met with any one who has had such a personal experience. The head stalker of a well-known forest recently told me that on two occasions he had known of wounded stags attacking a man. The story of his experiences interested me so much that I asked him to write it down in his own words. This he did, and the account he sent me was as follows:

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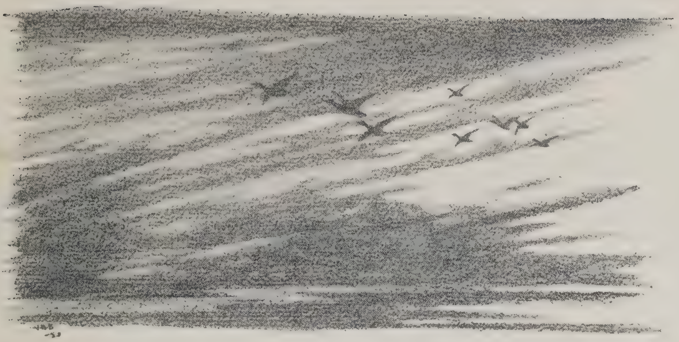
[1] In *One Hundred Years in the Highlands*, p. 132 (Edward Arnold, London, 1921), Mr. Osgood Mackenzie quotes an extract from a diary of his uncle, Dr. John Mackenzie of Eileanach, in which an incident of this kind is described as having occurred in Kinlochewe Forest.

"I enclose here a long detail about the only time I happened to see wounded stags attacking. You will find it a long story, but it so impressed itself on my mind I could not help giving the movements of each day in full. Twice in my experience of twenty-four years I have seen a wounded stag attacking a man. The first happened on September 25, 1902, when I was stalking with Mr. A. In our start in the morning to the first spying place we usually on the way moved some hinds, but did not trouble about this, as seldom stags were seen so low down till October and stormy weather came. But this morning, when near the spying place, what was my surprise to see to our right lying on a flat, mossy bank a fine big stag with ten points. He did not see us, and we were preparing to stalk him when some of the hinds we moved passed a little beyond and carried him away, so we sat down and kept our glasses on them for a long distance till they settled and began to feed, but the stag kept on walking slowly and climbing till he went out of sight over the ridge beyond. We had to make a long detour to get past the hinds, and when we got to the top and spied we found our stag some two miles away lying with a few small stags close to the march in a position fairly easy to stalk if he waited for about half an hour. We at once dipped down into the corrie at his right and moved along till opposite him. We then climbed till within 80 yards; he was still lying, so Mr. A. came to the conclusion to take him before getting up in case he would lose him on the march. Mr. A. fired, and hit high near the spine. The stag got up, but fell without making a step. I ran up to bleed him, and, crossing below, I noticed his head up again, and hurried up, when he made a straight bolt at me. With a quick jump to one side, I got clear of his head by a few inches. He toppled down the face and fell in a hollow. I think it was then he broke his back, as he could only raise his forepart. I called on Mr. A. to come up and finish him, as he was a dangerous beast. When he came in sight to one side and raised the rifle the stag half turned towards him and gave a loud, defiant roar, which was cut short by a bullet through the neck. He weighed 18 st. 2 lb.; the head had a wide span and long, but the horn was rather thin and smooth, which showed he was past his prime. Whether he roared because he could not manage to get at the man or with fright when he saw the rifle it is hard to guess, but I remember thinking how like his roar was to the roar of two stags at each other on opposite sides of a corrie.

" The second time was in 1907, about October 1st. This season we got some heavy stags on my beat. The heaviest was 20 st. 5 lb., and Mr. B., with whom I was then stalking, was keen to make a record average weight. One day we were spying near the far end of the beat, and saw a stag travelling on to our ground. At first we could not make out what he was, until he joined a bunch of hinds and showed us his broadside, when at once we saw he was a fine big beast, and, although neither of us said so, I believe we both thought at the time it was bigger than our 20-stoner. The day was getting late, and it was hard to stalk him where he was, and so near the march, if a failure, so we left him in peace, hoping for favourable wind and weather next day. Next morning we were early on the move and over the tops at best pace till we came to the spying point. We saw the same stag and hinds on the same face, but lower down, and, if anything, harder to get at. We went round the top of the corrie to get straight above them. The place was a green steep face without a particle of cover, but fine and smooth to slide down at a steady, flat crawl. When within 300 yards I raised my head up to spy out the best way. What did I see right in our path and under a small bank, and not over five yards away, but a small knobber! To pass to either side without him seeing us was impossible. I turned to Mr. B. and asked him what he proposed we should do, but got no answer, and I then said I would pitch a small stone to make him move somewhere. I saw Mr. B. nodded assent. Then, after having a look to study the little stag's position, I lowered down and pitched a stone on a guess, when I heard a sharp click like as if I hit him on the horn. He got sharply up and ran down at a terrific pace towards the near hinds, and they ran for a short distance down, when they suddenly all stopped and began to look sharply up towards us. I may admit I got palpitation, and from what I heard at my back I was getting no praise for my aim. Then we noticed the big stag, which was lying below and on the far side, rise, and, giving a loud roar, he made straight for the knobber, and drove him out and up towards us. But the little fellow got round him, and ran again into the hinds with the big stag in hot pursuit. The big stag drove him down and across the river, which was the march. He stood on the bank and gave a parting grunt, and then began to drive his hinds up towards us. We at once began to crawl slowly down so as to get the cover of a small hump that was between us, which we managed to do in good time and get the rifle ready, for shortly we saw the first of the hinds appearing about fifteen yards to our left. They at once noticed us, but as we were then turned into two stones they only shied off a little and moved slowly uphill, except one, which began to circle round to get into our wind. I kept my eye on her to see when she would give the alarm, when we were to move over the hump and chance the stag being within shot. But before anything happened I felt a touch from Mr. B., and, looking round, saw the top of the big stag's horns appearing quite close. When he noticed us he stood with a ferocious look towards us. Mr. B. quickly took aim and fired. I saw the blood gushing from the stag's throat, low, and near his foreleg. He staggered and fell. Mr. B. getting up suddenly threw his rifle down and ran over to bleed him. I went to pick up the rifle, and then, turning to have a look at our trophy, lo! there was the stag up and Mr. B. holding on firmly to both horns, his arms well out and rigged and kept well back close to his shoulders, the stag giving nasty digs and always trying to get into him. I saw at once that things were not looking well, so I loaded the rifle so as to disable the stag by shooting him through the haunches. When I stepped near for fear of accident they began of a sudden a merry go round and round, so fast that I dare not shoot. They went round and round six or seven times. I saw something would have to be done quickly, so, putting the rifle away, I stepped close and plunged in on the opposite side, taking hold of his horns, so with the weight of 30 st. between us we pulled the noble brute down, when Mr. B. managed to put the knife into his throat.

"Now this stag was losing a lot of blood all the time, and must have been losing his strength, which I consider saved us, and in my opinion the stag was keener to get into the man than to get away, for I noticed he always circled towards him. Mr. B., as a rule, always bled his own stags, and this time, after taking hold of the horn to bleed him, the stag got up suddenly, and Mr. B. stuck to him, and then Mr. B. found he could not safely let him go, as he saw at once the stag would turn on him if he got the least chance. He said to me after it was all over, ‘ That was a very near thing,’ and so it certainly was.”

My friend Vincent Balfour-Browne has reminded me that the latter instance of a wounded stag attacking a man is similar in some respects to Charles St. John’s thrilling story of the Muckle Hart of Ben More in his *Wild Sports and Natural History of the Highlands*, in which case, to use Balfour-Browne’s words, the stag was certainly keener to get into the man than to get away.



XIII

TRAPPED

I NEVER hear any one mention Spring-Tide without thinking of an experience which I had whilst duck-shooting on the north-west coast of Scotland.

On the afternoon of a certain autumn day I went out to try to shoot wild duck, the plan being that I should be landed with my gun and spaniel on a rocky islet in a certain sea loch, and that I should wait, taking what cover I could amongst the rocks, whilst the boat from which I was landed should be rowed up to the head of the loch in order to flush the wild duck of which there were always numbers there at that time of the year. It was known that on being disturbed the duck would fly down the loch towards the open sea, and some of them would probably cross the rocks on which I was waiting.

It was a fairly quiet though misty day when we set out, but there were clouds gathering in the east, and it looked as if there would be a storm before long. In due course I was landed on the little island, which was quite small and consisted of low-lying rocks. I said to my old fisherman, who with another man was rowing the boat, " Are you sure that these rocks are never covered by the sea ? " and he replied, " Ach, no, it is arl richt."

Away went the boat, and in it besides the two men rowing were an old friend of mine, who was a cautious Scot, and two ladies.

Not long after it was out of sight the wind rose and rain began to fall. After a time some duck passed out of shot, then a single bird which I killed, then after another interval a big lot well out of shot, and then at intervals two single birds, one of which I brought down. The spaniel had enough to do to retrieve the birds with the strong tide and high wind. Just after this a storm of wind and rain swept down the loch, and the sea became very wild. I was still thinking about the duck, but felt no anxiety after what the old

AMONG THE WESTERN ISLANDS.

From a Photograph by Miss DIANA DARLING.

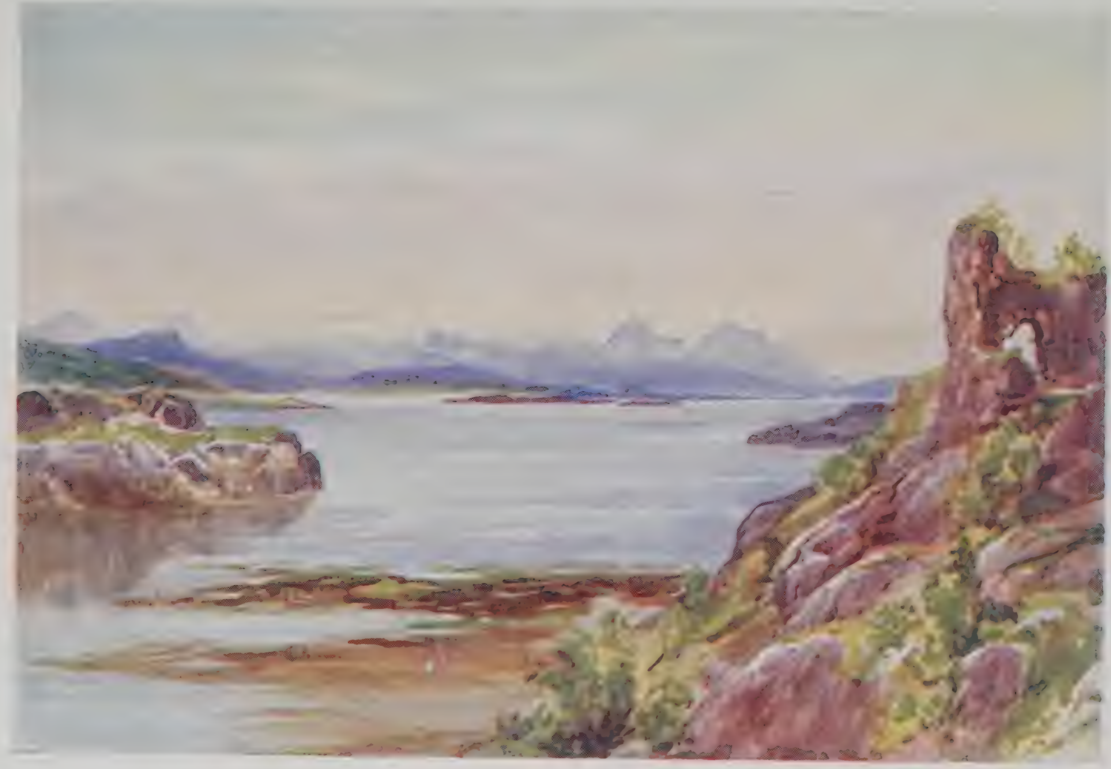
fisherman had said. After a time, however, I began to feel some apprehension, as the tide was rising very rapidly and there was only a comparatively small part of the island uncovered. I thought I had better make up my mind as to which was the highest point on the island, and particularly where I should have the best chance of retaining my footing if the sea rose much higher. I selected what seemed to be the best place for this purpose, with some short rocks in front of me, and took up my stand peering into the mist from time to time for a sight of the boat and hoping every moment to see it. There was now so small a part of the island uncovered that I was getting very wet from the waves, which were breaking with some force, and my dog was very excited, barking and whining and making a great fuss.

Things were becoming very serious, and I could see that unless the tide turned within a few minutes the rocks would be covered. The water rose so high and so rapidly that I was now standing in water and the ducks I had shot were washed away. Still no sign of the boat, and the tide still rising.

The waves by this time were breaking over the rocks, and for a few moments I was thoroughly alarmed, as I realised that if the tide rose a little higher I should probably be washed off, and though I could swim I had no reasonable hope of being able in that sea to swim the considerable distance which separated me from the mainland. However, the feeling of fear was very short, and was followed by a grim determination to hold on for all I was worth, and, strange as it seemed to me afterwards, a pleasurable excitement in what I realised was going to be a desperate effort to keep my footing. There were very few points of the rock left uncovered now, and the tide was still rising, when suddenly out of the mist I saw the boat coming, rising and falling in the angry sea.

To cut a long story short, it was a most dangerous and difficult job to take me off the rocks without upsetting the boat, but it was managed all right by the two men, the older of whom was a very experienced seaman. In less than three minutes after they got me off, the point of rock that I had been on was covered and there was nothing of the island to be seen.

My friend, to whom I shall be ever grateful, declares that he saved my life, and this I think



WHERE STROME CASTLE LOOKS OVER THE SEA TO SKYE.

By Finlay Mackinnon.

was the fact, for when the wind got up he insisted on the men going back to the island at once, feeling very nervous on my account, and they had a tremendous pull to get back in time as the sea was very rough and the tide was running strongly against them.

The cause of the rocks being covered by the sea—a very rare occurrence—was an unusually high spring tide coupled with a strong gale from the opposite direction, which made the waves much higher than they would otherwise have been in a loch which has the reputation of being one of the most dangerous lochs on the west coast for squalls.

XIV

THE LAST STALK OF THE SEASON

It was the last day of the stalking season in the forest of Fealar, where it had been my good fortune to spend the first ten days of October. I had been out stalking for eight days, during two of which I did not get a shot, but, with the exception of the preceding day, which had been a black Friday for me, I had been very lucky, having shot eight stags, and three of these I had stalked without the aid of a stalker, which had added greatly to my pleasure. But it was a melancholy fact that the last day had arrived, and what had it in store for us? On the preceding day I had had a series of misfortunes, and when I got up and looked out of my bedroom window the prospect was not a cheery one. A thick mist enveloped everything all round the lodge, which is one of the highest, if not the highest, of all the shooting lodges in the Highlands, 1764 ft. above the level of the sea. On coming down to breakfast my host said to me, " Well, I don't think it is any use going out to-day. What do you say ? " But I knew quite well that my host, one of the keenest and best of sportsmen, was only poking fun at me on this the last day of the season. By ten o'clock the mist had slightly lifted. There was a steady drizzle ; the high tops were still covered ; the wind was east to south-east—the wrong wind for this forest—and the prospect was certainly not inviting. However, we determined to make a start, and I was sent out on the beat of the head stalker, Macdougall. We had not gone more than a mile from the lodge when we saw a shootable stag with some hinds, and after a stalk up a burn and a considerable crawl over a peaty bog, we got to a point within shot of them. Macdougall was just getting the rifle out of its cover when something disturbed the deer, and away they went. Macdougall said he thought I must have shown myself, though I was not conscious of having done so. At any rate, I had succeeded in getting wet through in my efforts to keep flat and out of sight.

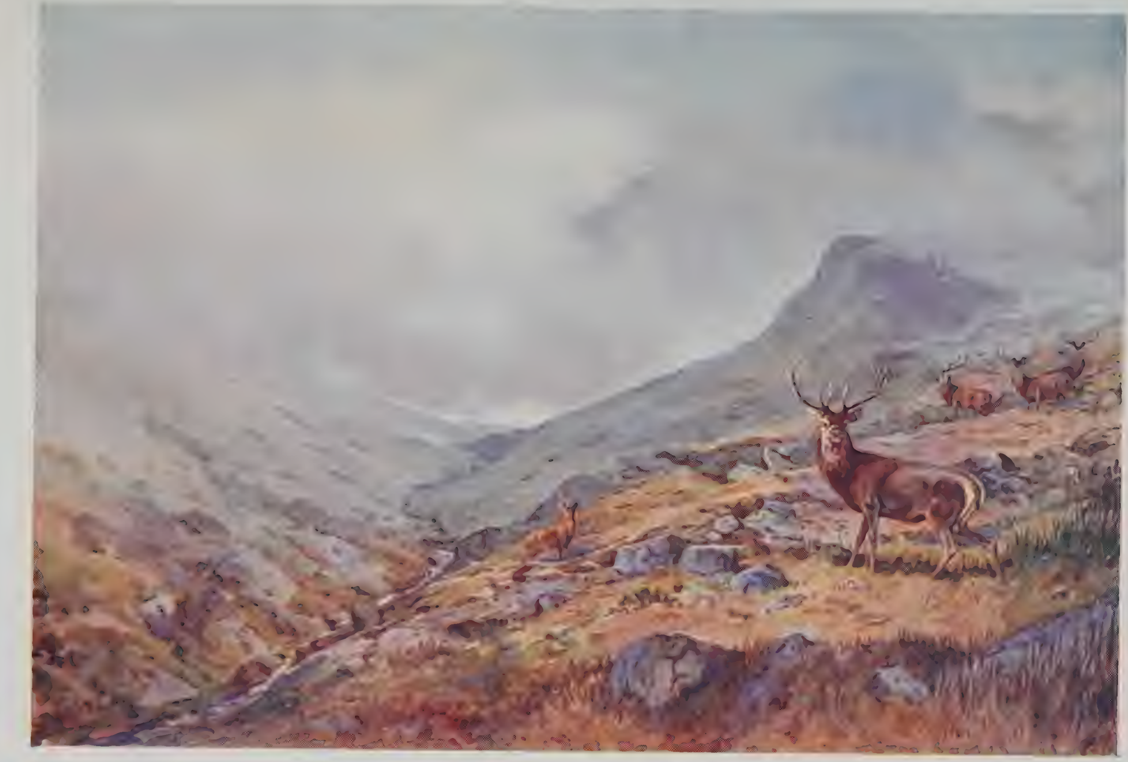
The weather continued thoroughly unsatisfactory. It was impossible to spy, and for the following hour we saw nothing. About the end of that time it cleared up a little, and we spied about a mile off a large herd of deer, between 200 and 300, and amongst them what appeared to be some very fine stags. We had to make a long détour, and then, by walking and crawling along the side of a burn, we succeeded in getting within what we thought must be a very short distance of some of the stags, judging from the sound of their roaring. We crawled up the bank of the burn, and found ourselves within about 200 yards of one end of the herd, where there was a fine 10-pointer continually on the move, rounding up the hinds. Macdougall said he thought we could get in much nearer by going back into the burn and crawling further up it. This we did, and then, after crawling a little way up the side of the hill, we got to within 100 yards of the 10-pointer. Almost immediately after I had got the rifle into my hands the stag, which had been perpetually on the move, stood for a moment broadside on, giving me a splendid chance. I fired, and the stag bounded forward a few paces, and then fell dead. He had a fine, regular head of ten points, certainly the best head I had obtained this season, although I had been fortunate in shooting a good many stags. It was by this time just twelve o'clock. Macdougall said we had better have lunch in order to allow the deer to settle down, and added that he did not think they would go very far. He said he was quite sure that there were at least other two very fine stags amongst the deer that had gone forward.

The stag was soon gralloched, and the gillie was sent back for the pony. We did not take long over lunch, and then set off in the direction in which the deer had gone, being guided by the perpetual roaring of the stags. After going some little distance we located the deer on the face of a hill rather less than two miles from us. Though there was still a drizzle and the light was bad, the wind had risen, and the mist had to some extent cleared from the lower ground.

After walking and crawling along the bed of a burn for about half a mile we got into a position from which we were able to spy the deer, as it had ceased raining and the light was better. We made out that there were two lots of hinds on the face of the hill with stags in both lots, and between them five stags. The largest of these stags had a very fine head, and, as often happens in the case of a big stag, had in attendance on him a smaller or sentinel stag. The stalker said he thought the big stag was a Royal, but was not quite sure. This stag and the others which were with him had evidently been driven away from the hinds by a heavy 10-pointer, who was the master stag, and who was making a great disturbance, chasing the smaller stags away, and rounding up the larger lot of hinds.

After a very laborious crawl, sometimes on all-fours, sometimes flat, sometimes in the burn, sometimes out of it, for about three-quarters of a mile further, we reached a point in the burn about 600 or 700 yards below the five stags which I have before referred to. In the meantime the wind had risen, and the weather was now very rough and stormy. Macdougall whispered to me that we should have to crawl up the hill in full sight of the deer, and this we proceeded to do for some 500 yards, watching the deer with the greatest care, and whenever one of their heads went up instantly becoming as motionless as statues, and so gradually getting up the hill until at last we got behind a little tussock. The little stag was in front of the four stags, close to him was the big stag, and some little distance behind the latter were the other three stags. Macdougall pulled the rifle out of its cover and beckoned to me to crawl up. He then whispered, " You'll have to take him now, sir ; it's the only chance you'll get. We can't possibly get a yard nearer." " Take him now," I said ; " why, how far off do you say he is ? " " Oh, maybe 330 yards," said Macdougall. " He's too far," I said. " I shall probably wound him, or more likely miss him." Macdougall's reply was, " I think you can manage him, sir, and, anyhow, it's your only chance ; we cannot get nearer." " Why not try to get to that next knobby," I asked, " about 100 yards further on, behind which the big stag is just going ? " Macdougall said that if we tried to do that the other three stags behind the big stag would be certain to see us and would bolt and put the whole lot off. "Well," I replied, " if they do, we shan't be worse off than if I fire now and miss. Come on, let's do the bold thing, it sometimes pays." Macdougall shook his head and said, " It's no wise, I'm thinking." " Come on," I said. " Well, sir," said

Macdougall, " if you will have it, we'll try, but I don't think it will be any good ; we shall have to crawl as hard and fast as ever we can up the hill, quite flat the whole way." Away we went as hard as we could, and it took me all my time to keep up behind Macdougall, who propelled himself along at a prodigious rate. Arrived behind the knobby, we very carefully raised our heads, and found that Macdougall's prophecy had fortunately proved only partly correct. The three stags behind the big stag and his fag, the little stag, had seen us and had bolted, but instead of going forward, as Macdougall had expected, they had turned tail and made off in the other direction, with the result that they had only put off the deer behind them and none of the deer in front of them. Macdougall hurriedly whispered, pulling the rifle out of the cover : " The big stag is still there, sir, but he and the wee staggie are getting varra suspeecious, and you'll have to take him varra quick. He'll be about 220 yards." " Well," I said, " I must get my breath ; I'm absolutely blown," the fact being that at the moment I felt absolutely done to the world and was quite incapable of shooting straight. The big stag had slightly moved and was now standing



"THE BIG STAG IS STILL THERE."

By FRANK WALLACE

about three-quarters end on, a very difficult shot. I raised the rifle, sighted the stag, and pressed the trigger. There was a sound of a little click, and that was all. " A misfire ! " I muttered below my breath. " Are you sure you loaded the rifle after lunch ? " " Yes, sir, I am," said Macdougall. " Very well, then," I replied, " I'll try him with the second barrel," and raised the rifle. " Don't fire," said Macdougall ; " we'd better make sure." With some difficulty, owing to the position I was in and the necessity of keeping as flat as possible, I opened the rifle, and lo and behold it was empty ! I loaded it as quickly as I could. Meantime, the stag had moved on a few yards, and was now standing broadside on. I put up the rifle, took a steady aim, and fired. There was a thud ; the stag gave a start and then moved slowly forward. " You have him," said Macdougall. I said, " I don't know that." " He's varra sick," said Macdougall, " and will never get over the hill." The stag had evidently been shot in the stomach. He was looking very sick, poor beast, and was walking slowly forward, stopping every now and then. All the other deer had disappeared as if by magic except the little stag, who kept some distance in front of the big stag, constantly looking round at him, evidently loth to leave his lord and master. I said, " I'd better fire again," and put up the 250 yards sight, as I estimated that the stag was now nearly 300 yards from us, and fired. " Over him, sir," whispered Macdougall. " We must get a bit nearer," I said. " I'm afraid if we move he'll see us and begin to run," Macdougall replied. " Well," I said, " we'd better try and get round him." So we crawled right round behind the stag, who kept on moving slowly and then stopping, and got to within about 220 yards of him. " Tak' your time, sir," said Macdougall. The stag gave me a good chance, broadside on; and I fired, believing that I was quite steady. " Missed him, sir," said Macdougall; " I saw something fly up behind him." " I'm not so sure," said I, and as I spoke, the stag, who when I fired had bounded forward three or four paces, staggered and then fell and rolled over and over down the hill, shot through the heart, as we subsequently found. Macdougall seized my hand and shook it vigorously, saying, " I hope, sir, he's a Royal. I believe he is." As we were getting up to the stag I said, " I see three on one top, but not on the other." " Ach, yes," said

Macdougall, "he has three on both tops. Yes, sir, he's a Royal, and we shall have to fine you a bottle of whisky according to the custom of this forest." "You may be quite sure I shall not mind that," I replied. On getting up to the stag we found that his head was a fine wild one, with exceptionally long horns. My first bullet had passed through the second compartment of the stomach, or, as it is called in Gaelic, currachd an righ, close to but a little below the heart.

Currachd an righ means in English "the King's cap," though it is sometimes called "the King's night-cap." Turned inside out it resembles in shape and dice pattern the old-fashioned night-cap. It is said that certain internal parts of the stag and other ingredients cooked in this "bag" or "currachd" was a favourite dish in the olden days, "fit for a king," or such as only a king could afford. That may be why it is called "currachd an righ." The corresponding small bag in the stomach of the sheep is also called "currachd an righ," and in English "the King's hood." The same word is used in Gaelic to signify Hood and Cap. *Night-cap* translated literally is "currachd oidhche," but in Gaelic the word "oidhche" or "night" is omitted;

presumably because there was only one kind of cap.

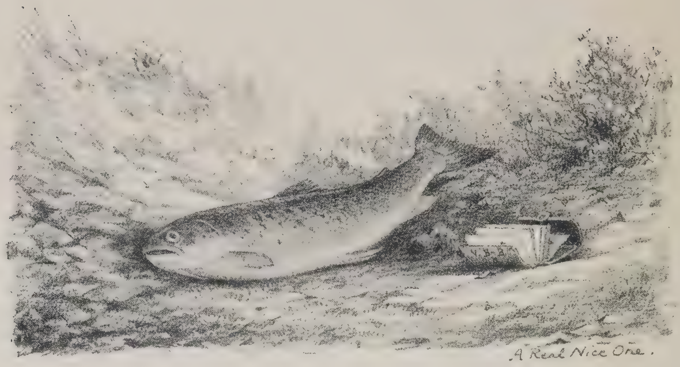
"Poca buidhè," which means yellow bag, is the Gaelic name of the first compartment or large bag of the stag's stomach, and is a name used only in the case of the stag.

Macdougall signalled for the pony, and then gralloched the stag. It proved to be a very troublesome job to get the stag on to the pony, although the latter was usually very quiet under such circumstances. Macdougall said the reason for his being so restive was that he could see the very long horns. After helping the gillie and the pony-man to put the stag on the pony, Macdougall and I tried to find some other stag, but in the time still at our disposal we saw nothing more except a few hinds. Curiously enough, the weights of the 10-pointer and the Royal were exactly the same to an ounce—namely, 15 st. 7 oz. clean, without heart and liver—and were the two best heads of the season in the forest of Fealar. Macdougall, who was a stalker of long experience, told my host that he had never had so strenuous a stalk as the stalk after the Royal, and he said to me on the way home, "I shall never believe in thirteen being an unlucky number again, sir, for I found just after we had started that we had only thirteen cartridges, and very nearly went back to leave one of them at home."

On our way down from the hill there kept ringing in my ears the familiar lines of Ruskin in *A Joy for Ever*, lines so true in the experience of those of us who are no longer on the threshold of life :

" It is wisely appointed for us that few of the things we desire can be had without considerable intervals of time."

My host had also shot two stags, though he had not met with the wonderful luck I had had. No one could have been more genuinely pleased at my good fortune than he was. So ended for me the last day of the stalking season of 1913, which was one of the most enjoyable and lucky days I have ever spent in the Highlands, and will always be to me a red-letter day.

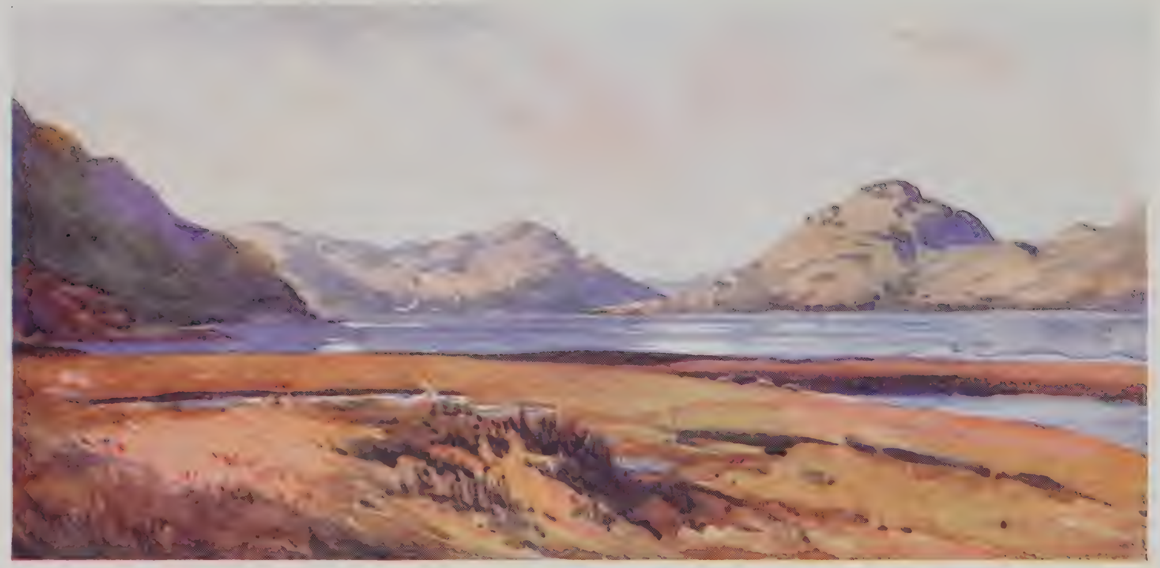

A Real Nice One.

XV

THE LOCH PROBLEM

For some twelve years I have been trying experiments on lochs on my ground in the North of Scotland, and have written what follows mainly because I hope and believe that the result of these experiments may prove useful to some of those who love trout-fishing as I do, and have the means at hand, possibly without fully realising their opportunities, of increasing their sport and that of their friends. I have spent much labour and a good deal of money in attempting to improve the fishing in various lochs. In some cases these efforts have proved useless; in others the labour and money expended in stocking the lochs and increasing the food supply have been altogether out of proportion to the results obtained, but in one case, and one case only, the results have been phenomenal, not only in my own experience, but also in that of my keeper, who, like myself, has all his life been keenly interested in and familiar with trout-fishing in the North. In the case of those lochs where no good result has been achieved, I have at least learnt something from my failure. The loch upon which I experimented with such wonderful results must have been a veritable larder of food for the trout when I put them into it, for there was a large quantity of water lizards, leeches, frogs, and above all, fresh-water shrimps; there were also various kinds of insect life, water beetles, notably the coch-y-bundhu, and a smaller beetle with a silver body which moves with a swift darting movement. It is impossible for the trout to spawn effectively, as there is no burn coming into or going out of the loch and no water continually moving over a shingly bottom. The loch is not more than six acres in extent, and is about 500 feet above the level of the sea. At the time, just thirteen years ago, when I began to put fish into it, there were no fish in it, and so far as I know there never had been any, except some years ago when a few trout were put in, but these had no doubt been caught or died long before I began my experiments. I am also quite certain, for the reasons already mentioned, that they had left no descendants. Every year, in May or June, about 2½ acres of the loch are covered with a common kind of rush, the "Horse-tail," *Equisetum maximum*, and about one-quarter of an acre with grass, which, I believe, is a species of *Scirpus*. In the rushes and round them are patches of a kind of surface weed which is common in Highland lochs, and which, as every fly-fisher in the Highlands knows, is a great danger to him. This weed, the scientific name of which is, I am told, *Potamogeton polygonifolius*, covers an area of some 20 square yards. Lastly, and most important of all, there is in the loch a considerable quantity of the well-known Water Milfoil or shrimp-weed, *Myriophyllum verticillatum*, which in this water produced quantities of fresh-water shrimp.

By August and September the rushes have, of course, largely increased, and extend to nearly four acres, leaving a comparatively small part of the loch which can be fished. The depth of the loch is about 3½ feet all over with the exception of two places, a very small part of it, where it is



AN AUTUMN DAY, LOCH CARRON—LOOKING WEST.

By Mrs. Schroder of Attadale.

about 5 feet. Its bottom is for the most part fairly hard ground, but on one side there is soft mud, and on another side, for about an acre and a half, the bottom is rocky. I began stocking the loch in 1910, and during the first three years put into it small trout from burns and other lochs on my ground, but in 1913 and 1914 put into it 150 and 200 Loch Leven yearlings respectively. These yearlings were supplied from one of the well-known hatcheries. In 1915 I put no trout into the loch, but since, and including 1916, I have put in every year on an average about eighty small trout taken entirely from burns—one of which runs into the sea and contains the young of sea-trout as well as small brown trout. The following table shows the exact numbers of fish put into the loch, showing a total of 1062.

1910.	Aug., Sept., Oct.	62 (20 fair size)
1911.	July, Aug., Sept.	61 (16 fair size)
1912.	July, Sept., Oct.	20
1913.	April	150
1914.	April	200
1916.	June, July	104
1917.	June, July	105
1918.	June, July	96
1919.	August	74
1920.	July	96
1921.	July, August	44
1922.	July	50

I have taken care that the loch should not be fished too much, and nothing has been used but the wet fly. It has only been fished in May and June and in August and September. In May and June, which are, of course, the best months of the year, it has only been fished for two or three weeks, and in August and September it is very difficult to persuade the trout to rise, and a rare experience to catch one. It has been suggested to me that I should introduce rainbow trout into the loch, as they would rise freely in August and September, when the large brown trout will not do so.

In May and June there is a hatch out of flies from the weeds on the loch and from the heather on the adjoining moorland. In particular there is a hatch out of a large fly, of which I have caught specimens. These I have sent south for examination, and am told that they are all sedges, the largest being the large red sedge, *Phryganea grandis*, those next in size being cinnamon sedges. I have had flies dressed in imitation of these, and if one is fortunate enough to be on the loch when the sedges are hatching out, there is grand sport to be had, and sport which is greatly increased by the presence of so many troublesome weeds. The loch was not fished until 1913, three years after trout were first put into it. Every fish caught under a pound, with very few exceptions, has been returned to the loch, but it is a curious fact that the fish rise very little until they reach about a pound in weight, and so we have not been troubled much by catching the smaller fish which would have to be returned to the loch.

The following is the record of fish caught, showing a total of 216, weighing 482 lb. 1 oz., and averaging nearly 2¼ lb.

1913. 6 trout, weighing 8 lb.; average 1⅓ lb.; largest 2 lb.; smallest ½ lb.

1914. 19, weighing 29 lb.; average slightly over 1½ lb.; largest 2½ lb.; smallest ¾ lb.

1915. 14, weighing 29 lb. 11 oz.; average just over 2 lb.; largest 3½ lb.; smallest 1 lb. 1 oz.

1916. 20, weighing 58 lb. 9 oz.; average nearly 3 lb.; largest 4 lb. 7 oz.; smallest 2 lb.

1917. 18, weighing 58 lb. 11 oz.; average about 3¼ lb.; largest 4 lb. 10 oz.; smallest 2 lb.

1918. 44, weighing 98 lb. 5 oz.; average nearly 2¼ lb.; largest 6 lb.; smallest ¾ lb.

1919. 13, weighing 28 lb. 4 oz.; average over 2 lb.; largest 4¼ lb.; smallest 1 lb.

1920. 20, weighing 59 lb. 6 oz.; average very nearly 3 lb.; largest 7½ lb.; smallest 1 lb. 2 oz.

1921. 30, weighing 48 lb. 13 oz.; average about 1⅝ lb.; largest 4¾ lb.; smallest ¾ lb.

1922. 32, weighing 73 lb. 6 oz.; average slightly over 2¼ lb.; largest 5 lb. 2 oz.; smallest 1 lb.

The exact weights of the 20, 18, 20, and 32 fish caught respectively in 1916, 1917, 1920, and 1922 (in which years the highest average was reached) were as follows :

1916.		1917.		1920.		1922.	
lb.	oz.	lb.	oz.	lb.	oz.	lb.	oz.
4	7	4	10	7	8	5	2
4	1	4	1	4	10	5	1
3	13	4	0	4	8	4	8
3	10	3	14	4	7	4	4
3	9	3	14	4	4	3	4
3	6	3	10	3	10	3	4
3	1	3	9	3	10	3	4
3	0	3	8	3	0	3	0
3	0	3	8	2	9	2	12
3	0	3	5	2	8	2	8
2	12	3	1	1	12	2	4
2	12	3	½	1	10	2	2
2	9	2	13	1	10	2	1
2	8	2	8	1	10	2	0
2	8	2	8	1	8	2	0
2	4	2	4	1	8	2	0
2	3	2	4	1	8	3 of 1	12
2	2	2	0	1	4	7 of 1	8
2	0	..		1	4	5 of 1	4
2	0	..		1	2	1	0

The fish caught have been remarkable not only for their weight but also for their extraordinary beauty and condition. Those of us who have seen them have seen many trout in our time, but have never seen trout to compare with those caught during the first four or five years after we began fishing the loch. Several of these, which we measured, were as much in girth as in length from the gills to the point of the tail where the flesh ends. They had small heads and were most beautifully coloured. Their flesh was in colour a deep red—no doubt due to the pigment in the fresh-water shrimps which, as I have said, abound in the loch.

It is an interesting fact that, although the loch was very little fished by ladies, they secured the two largest fish, one of 7½ lb., which took over three-quarters of an hour to land and gave splendid sport, the other 6 lb. The former was a most extraordinary fish. It was 22 inches in length, 16 inches in length from the gills to the point where the flesh ends at the tail, and 16 inches in girth. There is, however, no doubt that, with the exception of this particular fish, the fish caught during the last four or five years, whilst in excellent condition and comparing very favourably with the ordinary large brown trout caught elsewhere, have not been so extraordinary in their girth as in the first few years after the loch was stocked.

These experiments show the correctness of the opinion expressed by one of the most experienced of writers on the subject of trout culture, Mr.

P. D. Malloch, who says in his well-known work on the *Life History and Habits of the Salmon, Sea-trout, Trout and other Fresh-water Fish*[1] (p. 186): "When a farmer rents a piece of land for grazing he knows how many sheep or cattle it will pasture, and that if he puts on more than the proper number they will not grow. He also knows that if he introduce too few they will become fat and too lazy to eat up all the pasture, and he will thus lose part of the money paid for the pasture land. If the proprietor or the tenant of a loch would consider the matter in the same way as the farmer, he would obtain full value out of his lochs, be saved a deal of grumbling, and find life more pleasant." The same writer also says (p. 157): "Many naturalists maintain that there are different species of trout in the British Islands—Loch Leven trout, Gillaroo trout, tidal trout, and many others—but from a close study of all these trout for the last forty years, I have come to the conclusion that there is only one species of trout in Great Britain, and that in the different varieties the differences are caused by the nature of the water in which they are found and by the food they eat." Thus, as would be expected, there is no apparent difference between the so-called Loch Leven trout which were put into the loch from the hatcheries and the little trout from my own burns. Numbers of these splendid trout running up to 5, 6, and 7 lb. must be the brothers and sisters of the little fingerlings of the same age in the burns. The best authorities are apparently agreed[1] that the average life of trout is about ten years (although there are authenticated instances in which they have lived for a much longer period), that they reach their prime in six or seven years, that they remain in their prime for a few years longer, and then begin to lose condition and weight as old age creeps on. Those of the trout put into the loch in 1910 and 1911 which I have described as of fair size were about three to the lb., some rather larger and could not then have had many years to live. Those from the burns were probably of different ages, but it is highly likely that in 1913 and 1914, when the yearlings from the hatcheries were put into the loch, there were very few of such other trout as were still there that could live more than three or four years longer.

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[1] Adam & Charles Black, London, 1910.

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[1] See, for instance, the opinions of Mr. F. M. Halford in *The Dry-Fly Man's Handbook*, p. 395 (George Routledge & Sons, Ltd., London); Mr. P. D. Malloch at p. 179 in the work previously cited; Mr. J. J. Armistead in *An Angler's Paradise, and how to obtain it*; and Mr. Tom Speedy in *The Natural History of Sport in Scotland with Rod and Gun* (William Blackwood & Sons, Edinburgh and London, 1920).

So far there has been little indication that any of the trout caught have been cannibals—probably because they can obtain plenty of other food, and since their transfer to the loch have not been in the hungry condition in which they certainly were when they lived in the burns. On one occasion we found when carrying some of the little brown trout from one of the burns to the loch that one of the captives on the journey in the small can in which they were being carried had caught and succeeded in half swallowing another little trout half its own size.

Both Mr. Malloch (see pp. 130-132 of his work mentioned above) and Mr. Hamish Stuart (*The Book of the Sea-Trout*,[1] p. 240) agree that the young of the sea-trout, if confined in a loch, grow rapidly if the feeding be good, and are as silvery as sea-trout that are fresh run.

My experience in regard to the young of the sea-trout put into this loch confirms this view, as I have caught sea-trout up to nearly 2 lb. in the loch, which are in no way distinguishable from the ordinary fresh-run sea-trout. It is curious,

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[1] Martin Secker, London, 1917.

SUNSET ON THE SHORES OF LOCH CARRON.

From a Photograph by Miss ALEXANDRA FRASER.

however, that so far no sea-trout larger than 2 lb. have been caught in this loch.

To summarise the results of these experiments, it seems clear that in order to obtain the best results the following conditions should be fulfilled:

1. *There must be a sufficient supply of the right kind of food for the fish in the loch in order that they may grow to a large size.*

In order to attain this object, it is desirable that the loch should not be too high above the level of the sea. As Mr. Malloch says in the work to which I have already referred (p. 179): " Lochs over 1000 feet above sea-level, fed from snow from surrounding hills, produce little feeding until May, and owing to the cold fall off in September, thus giving the trout only four months of good feeding. On the other hand, lochs at or near sea-level produce good feeding in March, and continue to do so for three months more than their Highland brethren. It will be seen, then, that this extra time for feeding, when extended over the seven or eight years which constitute the life of a trout, easily accounts for the difference of size." Moreover, as the same writer points out, in a loch which is very high above the sea-level, not only is the feeding-time shorter, but the food is much scarcer.

On the question of food supply it is worth while to recall the words of Mr. F. H. Halford:[1] "Food supply generally is . . . chiefly dependent on the presence of the weeds in which the best forms of food for the fish are to be found. . . . It must not, however, be forgotten that, in Marryat's terse words, 'while floating food is caviare, sunk or mid-water food is beef to the fish.' Hence, when engaged in his examination of the weeds and the animal life contained therein, the fisherman should remember that he can only expect well-fed, good-conditioned, healthy, and consequently game trout in a (loch) which contains a bountiful supply of crustaceans, such as fresh-water shrimps and mollusks such as snails of the genera *Limnaea*, *Planorbis*," etc., etc.

Further, it is of the utmost importance that the number of fish in the loch should be regulated in such a way that the food supply may be sufficient to enable the fish to grow to a large size.

Where the fish cannot spawn effectively, and it is therefore necessary to renew the stock, experience alone can decide the number of fish which should be put into the loch every year. Spring is the best time to do this. The number of fish which should be put in will obviously depend chiefly upon the amount of food in the loch and the number of fish caught, and destroyed by their enemies, during the preceding year. In many lochs there are stones under which the small trout can find protection from the large ones, but where there is no protection it is worth while to put stones or small drain tiles round the edge of the loch.

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[1] *The Dry-Fly Man's Handbook*, p. 319 (George Routledge & Sons, Ltd., London).

In lochs where, as is usually the case, the fish can spawn effectively the fish increase so rapidly that there is not a sufficient supply of food, and the result is that the loch is filled with hungry small trout. When it is remembered that it is reckoned that every spawning trout produces 800 to 1000 eggs for every pound of its weight, some idea is obtained of the rapidity with which fish increase. In many lochs Nature intervenes and the enemies of trout—divers, herons, ducks, otters, etc.—keep the numbers down, sometimes to the point of extinction; in other lochs, owing to the severe frosts and other causes, it is only occasionally that the eggs are hatched out.

2. *The loch must not be too deep or the trout will not rise or will not rise well.*

This, I believe, is the cause of my failure in several of the lochs upon which I have been making experiments. As Mr. Malloch truly says :

" When a loch is more than 12 feet deep the supply of food soon becomes scarce and the trout small, while shallow lochs produce plenty of food, therefore large trout. . . . In constructing new lochs, one should endeavour to have as much shallow water as possible. . . . The best depth is from five to nine feet ; beyond twelve feet food becomes scarce and trout do not rise well in deep water."

XVI

THE SURGEON OF THE DEER FOREST

" In the Forest and on the moor there is a mighty Doctor before whom the greatest physicians and surgeons in the world must bow down. Nature acting in a pure air on an absolutely healthy subject will work wonderful cures. . . . It seems marvellous that the broken leg of an animal so restless as a stag should heal, but it is the case. . . . Such a wound will heal and the animal ultimately be little the worse for it."

Such are the words, in his book *Wild Sport with Gun, Rifle, and Salmon Rod*, of Mr. Gilfrid

W. Hartley, a stalker of great experience, and the author of some most fascinating reminiscences on stalking.

Every good sportsman is, of course, greatly distressed if he has the misfortune to wound a stag without being able to kill him. No matter what care may be exercised, it is impossible, even for the best of shots who has been accustomed to stalk for many years, not to experience some time or other a catastrophe of this kind. It is at any rate some slight consolation to know that Nature can effect the marvellous cures of which there is authentic record.

Much can, no doubt, be done to improve one's shooting by regular practice. Some years ago I was discussing the subject with one of the old Highland proprietors who is a first-class rifle shot, and he told me that for many years he had been in the habit of practising shooting at a small wooden stag, which he had placed in all kinds of different positions and at different distances on the hill. He added that he was sure that this had greatly improved his shooting. This interested me greatly, for I had for a long time been doing the same thing and am a great believer in its advantages. Amongst other things which it teaches one, is to judge distances more accurately.

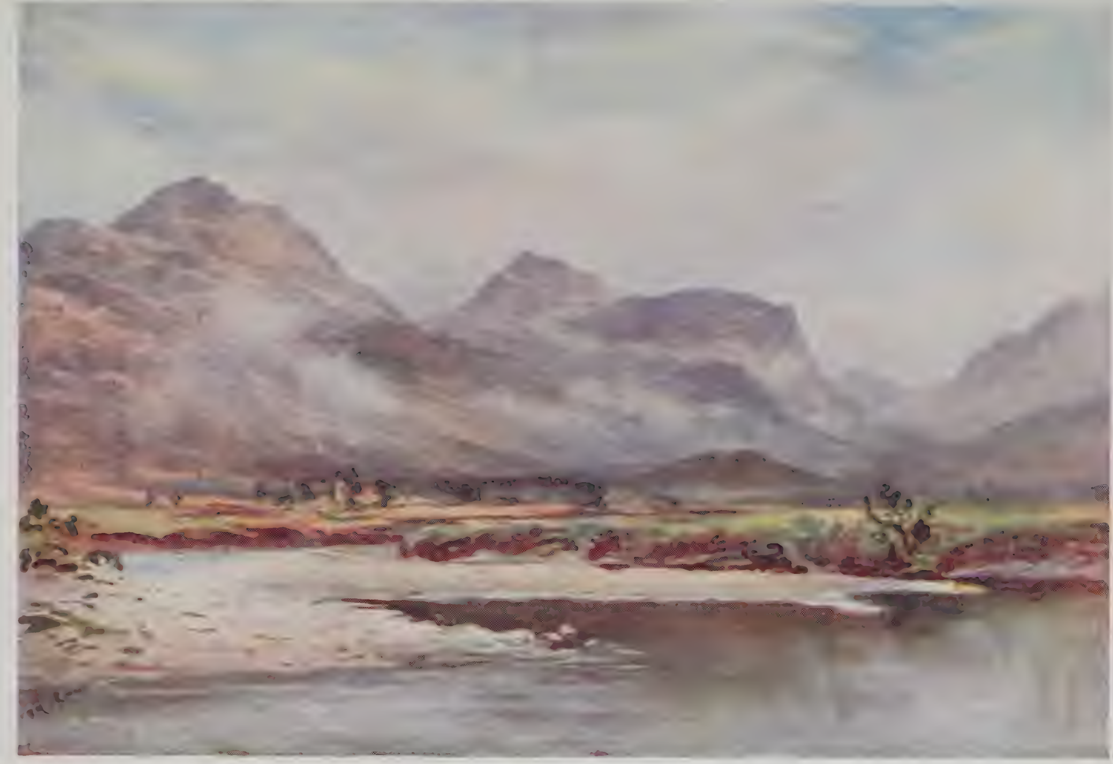
In the course of my wanderings through many forests, I have often discussed with experienced stalkers the subject of Nature's wonderful cures, and as recently as the year before last, whilst I was stalking in a forest in the Western Highlands, the head stalker related to me a remarkable experience of his own. I thought the story worth recording in some permanent form, but felt that I myself could not do justice to it. I therefore asked my friend the stalker if he could find time, after the stalking season was over, to write out for me the account of this particular experience.

Some five months later I received the account from him, accompanied by a letter which contained the following words : " You will find the enclosed story about the wounded stag. And indeed, I would prefer stalking through wet and bogs for six hours than one hour trying to put my experience on paper." Here is the story in question :

" As I promised, I am writing about one of my experiences which fixed it greatly on my mind as to the power of a stag to recover from a serious wound.

" The year 1905 was a very wet season in this district, and while stags were not good in condition, there were some good heads to be seen. I had that season one of the best of sportsmen who knew a great deal about deer and their ways, and had an experience of thirty years behind him.

" My beat is a narrow long piece of high ground and stretching well in between three adjoining forests coming to a narrow point, and on this narrow part there is a small corrie. This corrie is the best for keeping stags I know of, but rather difficult to stalk except with north-west wind. With other winds, although successful in a stalk, one is sure to drive the rest of the deer into one of the adjoining forests, the stalkers in which were very much on the alert at that time to make the best use of any move in their favour on the marches. There was a long spell of south and south-west wind, and although there were quite a lot of stags in this corrie we had to wait long for favourable wind so as to move them further into our own ground. About September 25 we were having a spy at the corrie, and noticed a newcomer with quite a big, strong head of ten points, and on each horn very peculiarly shaped tops with cups, the three points on the top in



ON THE EDGE OF THE DEER FOREST.

By Finlay Mackinno

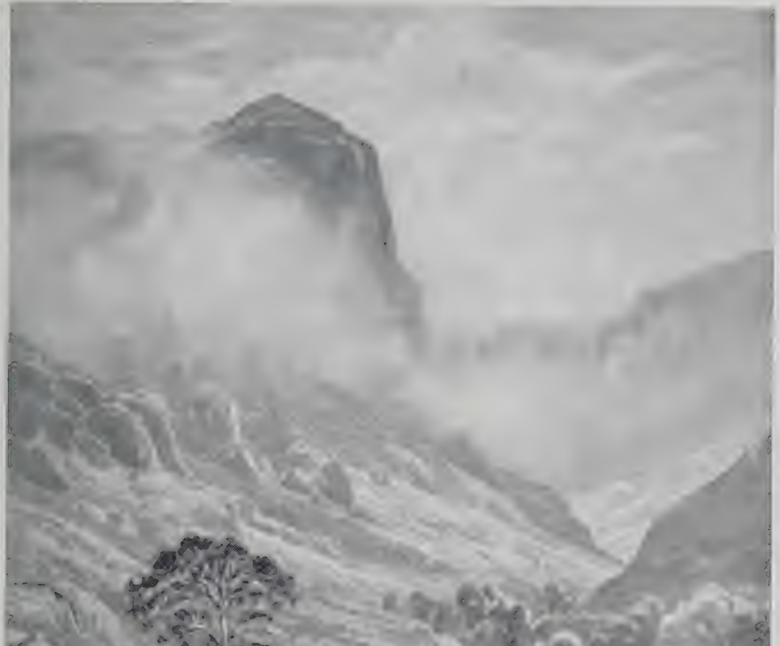
each horn curving towards one another until the tips almost touched. We at once came to stalk him, while keeping so far as safe with wind between them and the boundary. We came to a point we considered likely if they kept on their way feeding, as in so doing they would pass us within a reasonable distance. This they did, but the ten-pointer keeping well at the end. When he was within 150 yards head on, all of a sudden he turned right round and began feeding quietly away tail on, with haunches towards us. We were in a high fever discussing whether he would still turn and follow the rest of the deer or had made up his mind to part with them altogether. We concluded the last was his decision, and so prepared to have a long shot if he would give us the best chance. When well over 200 yards, he turned half-broadside, and immediately the gentleman had a go at him. His first shot went high, and the stag bolted down the corrie, and with his second got him high in the offside hind leg and broke completely his thigh-bone, as I could see his leg swinging out to his side at every jump. We sat down, watching him going down the lower corrie until he came to a shoulder, and began to climb up the ridge towards the highest part of the mountain. When almost on the top he stood looking towards us, and after a long time lay down. When we saw him settling we moved quietly to where we left the gillie, and gave him instructions to watch and let us know which way the stag went if he got up and went away, for we had to make a long detour out of his view to get round and, if possible, to get above him. When we arrived he was not to be seen anywhere, so we began to spy and get directions from the gillie, who signed that he went round the shoulder before us. It was getting late and dark, so we hurried after the stag. When we got round the shoulder we could dimly see him limping away a good deal below us, and towards the boundary, so we considered it was best not to follow further in case we forced him over the march and then lost him in the dark, for we were in hopes to find him next morning near this place, and possibly dead. As he did not catch us following him, he slowed down to a stand, so we left him there.

" Next morning, we were on the move early and got up to where we left him, searched every hollow and corner on our side and as far into the other side as I dared, but could not find or see him anywhere. So, when home, we wrote to the surrounding tenants with a description of the head, and to have a look-out, when we would expect the head to be sent to us if the stag were found dead. But none ever came across him, so we gave up hopes and expected he was dead in some hole.

" The following year the forest was taken by a new tenant, and there was no more thought about the lost wounded stag till, about the beginning of October, what was my surprise to see, and very near the same place and corrie, a stag with the same kind of head and peculiarly formed tops. I mentioned to the gentleman our experience last season with one very like this stag in the same corrie, but I remember our remark was that it was more likely one of the same breed, so lost no time in spying, as everything was favourable for a successful stalk. We got to a nice distance, and shot him dead. When I went down to examine him I was surprised to find that he had no brow-points, and instead of being a ten-pointer he was only an eight-pointer. I could not see anything like last year's wound at the time, but next morning, when I went to the larder where he was hanging skinned, I noticed at once his right leg showing exactly where our last year's bullet had broken it, but now nicely healed up, and it looked as though both legs were exactly the same length. I could not say if he had a limp, as he was standing all the time till we had our shot. I got this haunch for my own use and had it boiled and stripped of flesh, when I could see plainly how well it joined. The bone was jagged at both ends, and the longest points exactly touching, and the missing parts were filled up with tough hard flesh. I noticed a splinter on the outside which lay so neatly in place, and even to both ends. The stag weighed 15 st. 11 lb. He was in fair condition, but not up to the average; he looked to me to be much heavier the year before, although that year we had much better average weights."

Lieut.-General Crealock, in *Deer Stalking in the Highlands of Scotland*, relates a case of the same kind:

"I remember," he says, "wounding a Royal Stag some years ago at Loch Luichart—I broke his fore leg at the shoulder. Having no dog with me I never succeeded in getting up to him to finish him before dark, and so lost him. The wound was not mortal—it had shattered the bone; he recovered and lived for several years



IN ACHNASHELLACH FOREST.

By Finlay Mackinnon.

after, but he always had a stiff joint. The first year he never shed his velvet and dropped a point from his royal head ; the second year he cleaned, but never regained his royal head or even a good one again.''

In Speedy's *Natural History of Sport in Scotland with Rod and Gun* there is an interesting account of a thirteen-pointer whose hind leg was broken above the hock. In the forest in Inverness-shire where this stag was, the deer were regularly fed during the winter. "When feeding commenced he came regularly as before ; but in consequence of his wound he was reduced to a skeleton, and, being very weak, was kept off by the other stags. He used to hide, however, not far off, and when the others took their departure he returned to the feeding-place, when the keeper attended to him and had opportunities, with the aid of his glass, of noting the injured limb at a comparatively short distance. Within a month after feeding commenced, he was able to use it, and in three months was master of the herd. . . . As the new antlers grew it was found that the one on the opposite side from the broken limb was minus the brow-point.'' He was shot in that season, and scaled 17 st. 12 lb. clean, being then nine years old.

I myself had a personal experience which is perhaps worth recording in this connection. I was stalking late in the season—indeed it was the last day that I was out—and we had been unable to get a shot until late in the evening, when I killed a good stag. We had some miles to go before we reached the end of the road in the forest where the motor-car from the lodge was to meet us, and the light was beginning to fail. We were high up on the side of a corrie, and were preparing to start on our homeward journey, when Sandy, the stalker, suddenly turned to me and said, pulling out his glass, "I see some deer down there on the flat."

In a moment he had his glass on them, and said: "Would you be liking another stag? There's a fine stag with hinds, and we shall not be long getting down to them. It's been poor sport to-day."

I hesitated for a moment, and then, I am afraid, considering how late it was, weakly yielded to the temptation. I said: "All right! We shall have to be quick, otherwise we shall not be able to see what we are doing." We soon decided our method of approach, and lost no time in getting down the hill. The deer were feeding on a small flat piece of ground near the ruins of what had been a watcher's cottage many years ago, and we hoped, by getting into a broad and fairly deep burn, to reach a point about 200 yards further down, from which I could get a shot. The water was sometimes up to our waists and bitterly cold, and our movements were necessarily slow, but we arrived at last at a point which was about 140 yards from the stag. Peering over the top of the bank of the burn, we saw that the stag was on the far side of the hinds from us, and was lying down in a dip of the ground, so that only the tops of his horns were visible. After we had been waiting in the burn for some time, the stag got up, and, without giving me a chance for a shot, walked on to lower ground, where he began to feed in such a position that it was impossible to see him until he put his head up, and then we could only see the upper part of his horns. After a few minutes I whispered: "I really can't wait here any longer, it is so frightfully cold, and the light will soon be gone. Let us get out of the burn and chance our being seen: at any rate, we shall be higher up there, and be more likely to see the stag."

We cautiously hoisted ourselves out of the burn on to the flat ground on the top of the bank, but even there could only see the stag's horns and a very small part of his head.

Sandy whispered to me: "You will have to shoot off my back, sir; it is the only chance." He carefully raised his back, and I put the rifle over it. I said: "I am too low now; I can't see the stag's body."

"Ye'll just have to put the coat on my back," said Sandy, pushing towards me my rolled-up shooting-cape, which was fastened up with a strap. I hoisted the rolled-up cape on to Sandy's back, and then prepared for a shot by putting the rifle on the top of the cape—an extraordinarily foolish proceeding. What I certainly ought to have done was to have stood straight up and fired at the stag from my shoulder. However, I took my shot in the position described, and something, I don't know what exactly, caused me to pull off.

"His hind leg is broken," said Sandy, as away went the stag and the rest of the deer. I instantly handed him the rifle, as I knew he was a first-class shot at running deer, and told him, if he could get the chance, to finish the stag off.

After a short interval I heard a shot, and then a second shot. Soon afterwards Sandy returned, and said, " You'll never see him again, sir. I never touched him."

It was almost dark, and we started on our homeward journey along the narrow foot-track through the forest. Sandy asked me to walk first so that I could go at my own pace. He followed me, and behind him came the gillie, there being only room to walk in single file. It is not easy to carry on a conversation with any one who is walking behind, nor did the fact that I felt very depressed at having left the wounded stag in suffering, perhaps to die a painful, lingering death, make it any easier. At first I made an occasional observation and then lapsed into silence. As I was walking along engrossed in my melancholy thoughts I noticed that the path was becoming more and more difficult to see, and indeed hardly visible in the growing darkness.

I said, " It's getting awfully dark, and I can hardly see the path." No answer. I turned round: neither of the men was to be seen. I stopped and shouted loudly, " Sandy ! " Still no answer. This I repeated several times with the same result. I then began to think what I had better do. It was almost dark by this time. I was in the heart of one of the largest forests in the North of Scotland, miles from any human habitation, without a scrap of food, with an empty flask, and soaked to the skin up to my waist through wading and standing in the burn, which was in flood.

I decided to retrace my steps to the old ruins of the watcher's cottage from which we had started. Taking great care not to lose the path, I began to do this, shouting now and then but hearing no reply. I tried to think out why the men should not have been following me on this path on which I was now returning, and which ran beside a broad burn which was in spate. I then remembered that the path which I had been following across the forest before I came to the burn was almost at right angles both to the burn and the path I was now on, and it occurred to me that possibly the path which I ought to have taken lay straight across the burn, and that the men might have crossed the burn and gone in that direction. I had, I knew, been walking, as I always do on these occasions, very fast, and this made me think it not unlikely, especially as it was so dark, that the men had assumed that I had crossed the burn in front of them. Being careful not to lose the narrow track I was on in the darkness, I discovered the point at which I had turned up the burn-side, and found that the other path leading up to the burn was a little wider, which encouraged me to hope that my supposed explanation might prove to be the true one. I then waded across the burn and found there was a path at right angles to it on the other side which looked more used than the track which I had just left. I therefore made up my mind to follow this path for a time, shouting every now and then in the hope that the men might hear me, and if I did not hear any reply I would then consider whether I would go on or retrace my steps to the old ruins and there spend the night—a cheerful prospect indeed.

After going some distance along the path I suddenly heard what I thought was the sound of shouting a long way off. I stopped and shouted more loudly than ever, and then heard the shouts coming nearer, and very soon after Sandy and the gillie appeared. It turned out that what I had supposed had happened, and that they had crossed the burn thinking that I was still in front of them.

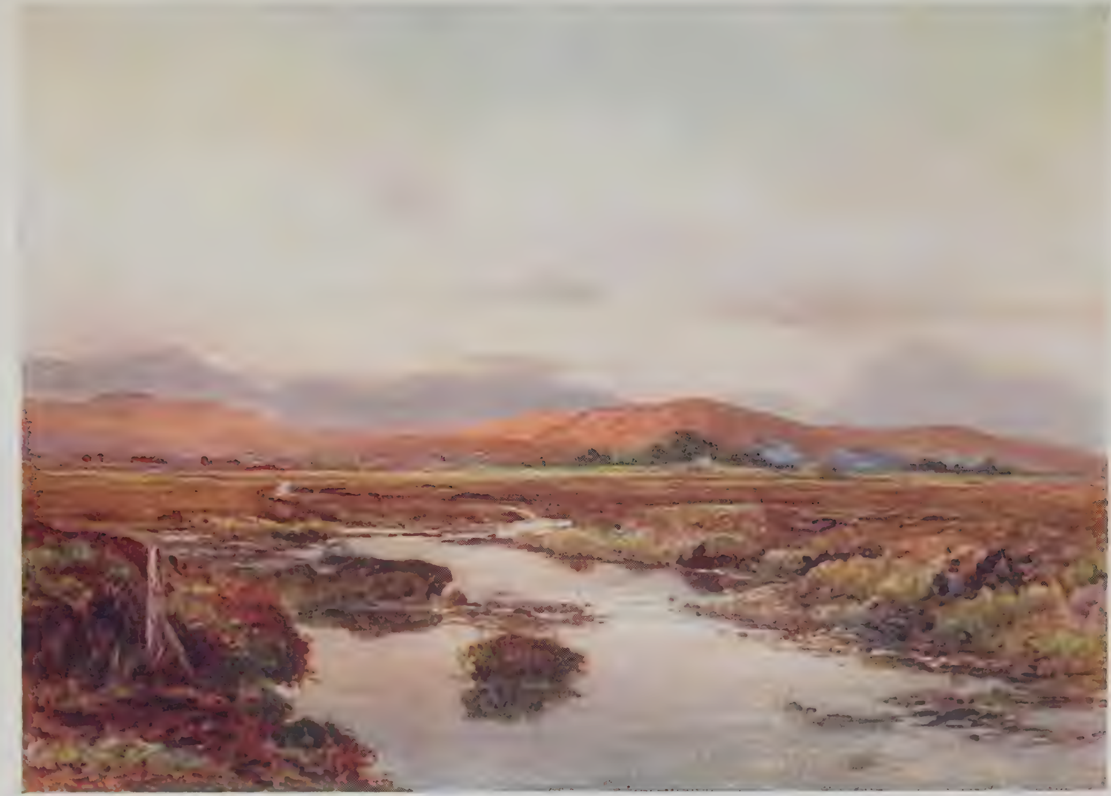
I have never since then, on my return from stalking, walked in front of the stalker along a path which I do not know. This unpleasant incident made us later than ever, and I did not get back to the lodge until nearly 10 P.M.

The following season I was again stalking in the same forest, and on my first day was on the same beat where I had had the misfortune to wound the stag, as described above, and the same stalker was once more with me. I asked him whether he had heard anything of the wounded stag, and he replied, " Nothing whatever," adding that although he was sure that the near hind leg was broken, he could not be sure in the darkness at what part exactly, but he thought it was low down.

We began by spying a corrie, which was about three miles from the place where I had wounded the stag in the previous season, and presently found five shootable stags which were together. After watching them for a time, Sandy said, " There are two much bigger than the others—one a dark beast; he's a good stag, with only one horn."

" All right ! " I said. " Let's shoot him; he'll be interesting anyhow."

We then stalked the stags and managed to get within about 120 yards of them. As soon as I



EVENING GLOW, POOLEWE, ROSS-SHIRE.

By Finlay Mackinnon.

got a good view of the beasts I noticed that the stag with one horn was limping slightly, and it flashed through my mind that he was almost certainly the stag which I had wounded in the previous season, particularly as he was the same colour and the horn seemed to me to be very similar to what I recollected of the horns of the wounded stag. Whilst these thoughts were rapidly passing through my mind, Sandy whispered, " Don't take the stag with one horn, sir, but the yellow stag on the right which is a much better beast."

I replied by shooting the dark-coloured stag—this time in the right place.

" You've shot the wrong beast ! " said Sandy. I said, " Oh, no I haven't. You were with me last time I fired my rifle, and I then fired it at that very stag ; let us have a look at him and see if I'm not right."

On examining the stag we found that low down on his near hind leg the bone had evidently been fractured just above the fetlock, but had healed completely and set in the most wonderful way. This, of course, was what had caused the limp which I had noticed, and also the absence of the horn on the other side of the head. After examining the stag, Sandy quite agreed that there was no doubt it must be the same stag, and we both thought, although it was in very good condition, that it was at least a stone lighter than it had been in the previous season.

It is interesting to note that in the case of stags, as in that of human beings, the muscular movements are controlled by nerve centres which are situated on the opposite side of the brain.

XVII

THE SECRET OF THE HIGH HILLS

"I SHALL never forget that day, or the self-sacrifice and bravery of those men in that Brigade." The speaker was a chaplain attached to one of the Highland Brigades which had been fighting in France. "We were told that a particular position had to be taken, and the work was allotted to certain of the Highland regiments. My work was to attend the dying after the attack was over and the position carried at the point of the bayonet. Amongst them was a piper who had shown extraordinary bravery in the assault, and who, though wounded three times, had persisted in carrying on and playing his pipes until he fell mortally wounded just as the assault, after very heavy fighting, was proving successful. He knew he was dying, and gave me messages for his wife and family. He was evidently a man of strong faith, and had no fear of death. Just before his valiant spirit passed away, he whispered, ‘ Oh, if I could only see the high hills again before I die.’ His words deeply impressed me, and I have often thought of them since.”

This story of the dying piper, told to me in such simple and touching language, set me thinking and wondering. I could not help feeling that those last words of the gallant Highlander would strike a sympathetic chord in the hearts not only of those whose most cherished and sacred memories are bound up with the Highlands of Scotland, but of countless numbers of others who also love that country. In the days of peace I had often pondered over the irresistible fascination of this call from the North.

The Highlands of Scotland ! Is there any one who has ever seen them, or who knows even slightly something of their romantic and enchanting history, who can fail to understand the passionate devotion of any one with Highland blood in his veins to that wonderful land ?

"All the world over the sons of the heather and the mist, in however distant or alien lands they may be, feel always, as they steer their way through life, that there is a pole-star by which they set their compass; and that some day, perhaps, they or their children may steer the boat to a haven on some rocky shore, where the whaup calls shrilly on the moors above the loch, and the heather grows strong and tough on the hill-side, and the peat reek rises almost like the incense of an evening prayer against a grey, soft sky in the land of the north."[1]

> From the lone shieling on the misty island
>   Mountains divide us, and a waste of seas.
> Yet still the blood is strong, the heart is highland,
>   And we in dreams behold the Hebrides.[2]

How many a man at the end of July or the beginning of August, worn out with his work in Parliament, or the Law Courts, or elsewhere, turns his face and his thoughts to the North, and finds even in his anticipations and dreams of the days to come refreshment and solace! In most things in this life the anticipation is far greater than the reality, but not so in this case. In the hearts of how many men and women do the words of Aytoun find a responsive echo :

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[1] *A Lame Dog's Diary*, by S. Macnaughtan, pp. 239, 240 (John Murray, London, 1915).

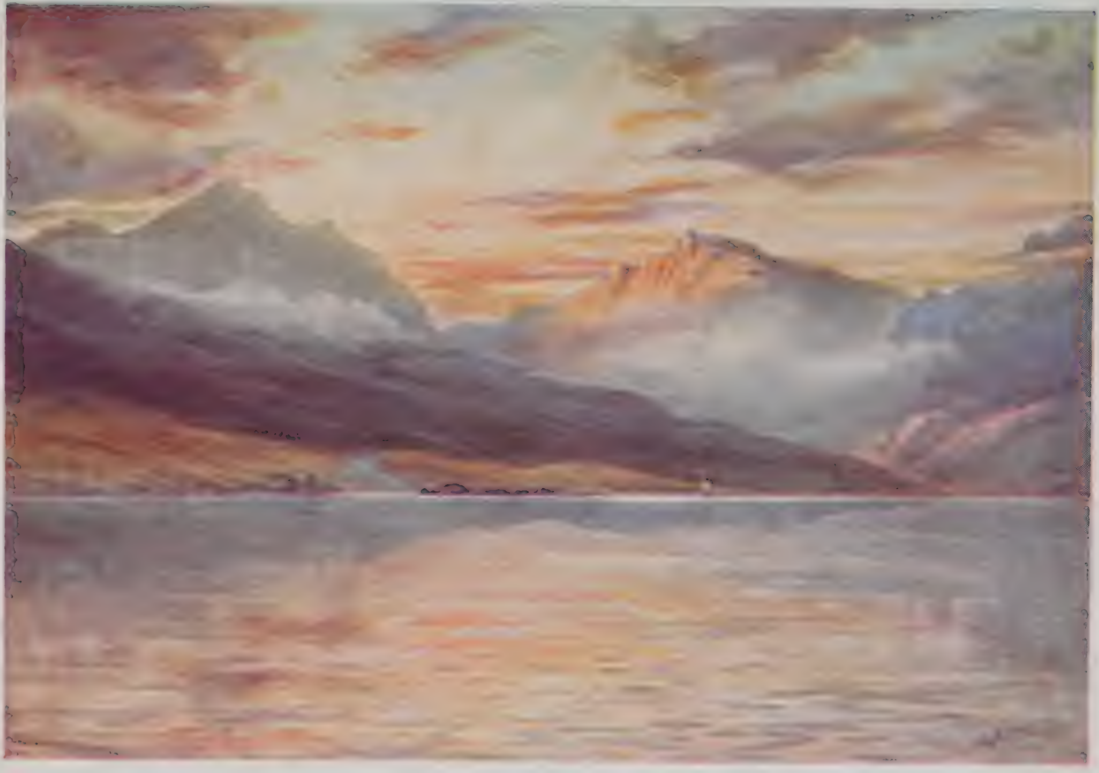
[2] "Canadian Boat Song," *St. Andrew's Treasury of Scottish Verse*, by Mrs. Alexander Lawson and Alexander Lawson, pp. 133, 134 (A. & C. Black, Ltd., London, 1920).

Give me but one hour of Scotland,

. . . . . .

Southern gales are not for me ;
Though the glens are white with winter,
Place me there and set me free.

Why is it that so many persons, young and old, and of such different character, habits, and classes, are fascinated and held by the spell of this country ? What is the motive which is common to them all, if there is one ? No doubt with some it is the longing for rest and change of scene, or the opportunity of meeting old friends or relatives in the far North, with others the desire for sport or the gratification of artistic tastes, and with others the ardent yearning to hear again the old familiar sounds, familiar since their early childhood—the sound of the rushing burn, the breaking of the sea on the rock-bound shore, the call of the sea-birds—and to see once more the high hills and silvery lochs and scent again the fragrant heather. But underlying all these, and perhaps more often than not quite unconsciously, there is one dominant governing



"THE MORNING COMETH."

By Finlay Mackinnon.

motive which is surely spiritual rather than material—the desire for the environment which will uplift and ennoble, and with it bring a sense of being nearer to the pure—nearer to the things that are unseen and eternal—removed from all that is coarse and material.

I well remember on one occasion discussing the question of the future world with a Highland keeper, and the emphatic way in which he said, " One thing is certain, and that is, that no one could be an atheist if he spent his life on the mountains." I also remember that, curiously enough, the same observation was made by one Cambridge undergraduate to another, the speaker having been in the habit of spending days and nights camping out on the mountains in his father's Highland property.

It is not inappropriate that in the Gaelic language the words used to signify " death " and " died " are not the same when used in reference to a human being as the words which are used in reference to an animal, the former words, *caochladh* (substantive), *chaochail* (verb), signifying a change or passing from one state of life into another, the latter *bas* (substantive), *bhasaich* (verb), extinction or annihilation.

On the sea coast, at the mouth of one of the sea lochs on the west coast of Ross-shire, I have often waited for the dawn, looking up the loch towards the high hills in the distance, and, whilst I waited, there would come into my mind those impressive words of the prophet Isaiah, " Watchman, what of the night ? " The watchman said, " The morning cometh." No one who has had this experience and seen the sun rise in its splendour over the high hills, flooding the surface of the sea with brilliant crimson light, will ever forget the scene, or the uplifting of spirit and sense of abiding peace which it imparted.

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